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JULY—

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" E. MASON, Stretford. | " T. BRIGGS, Halifax.  
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NOTICE IS ALSO GIVEN that we are carrying on the business  
formerly carried on under the name of "Scott & Co.," at the  
Crown Chemical Works, by our Mr. James Edward Johnson,  
in partnership with others, and that an interim injunction  
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Sling, in an action of "Kindersley & Johnson v. W. T. Scott,"  
preventing the Defendant from representing that he is  
carrying on the business of Scott & Co., or is in any way  
connected with such business; and by a further Order, made  
on the 6th day of July, 1888, the registration of the trade-mark  
"Velvet Sulphur," as improperly obtained by the said  
Defendant, was ordered to be expunged.

NOTICE IS FURTHER GIVEN that proceedings will be taken  
against all persons infringing the above or any other of our  
well-known trade-marks.

JAS. EDW. JOHNSON JOHNSON.

JAMES HOOPER.

(Trading as Kindersley & Johnson),

Crown Chemical Works,

Stratford.

Died 7th day of August, 1888.

**REPORT**

ON

**COLEMAN'S LIEBIG'S EXTRACT**

OF

**MEAT AND MALT WINE,**

By FRANCIS SUTTON, Esq., F.C.S.,

Public Analyst for the County of Norfolk, &c.

FRANCIS SUTTON, ESQ., F.C.S.,

Analytical and Consulting Chemist,  
Author of Handbook of Volumetric Ana-  
lysis, Chemist to the Norfolk Chamber of  
Agriculture,  
Gas Examiner for the City of Norwich.

NORFOLK COUNTY ANALYSTS  
OFFICE,

LONDON STREET, NORWICH,  
July 25th, 1888.

I hereby certify that I have made an exhaustive analysis of the Meat and  
Malt Wine prepared by Messrs. Coleman & Co., Limited, Norwich, with a  
view to determine chiefly whether it really contains an appreciable quantity of  
Meat Extract, and whether it is entitled to be classed as a suitable dietetic  
stimulant for invalids. The result of my analysis proves that it does contain  
a suitable proportion of all the most valuable principles contained in Liebig's  
Extract of Meat. It is well known to physiologists that this extract is not  
valued for the ordinary albumenoids (such as gelatine and albumen), which  
are, indeed, excluded to a large extent by the process of manufacture, but that  
its chief value, as shown by Baron Liebig himself, consists in its containing  
those essential principles peculiar to flesh, and which have a remarkable  
restorative power over the nervous system of invalids, thus rendering Liebig's  
Extract famous. In addition to these valuable substances the wine also  
contains a considerable quantity of Malt Extract, which is also well known an  
appreciated as an excellent restorative in cases of debility.

In addition to this the wine is of pure, natural quality, free from  
sophistication.

As witness my hand,

(Signed)

FRANCIS SUTTON,

Public Analyst for the County Norfolk, &c.



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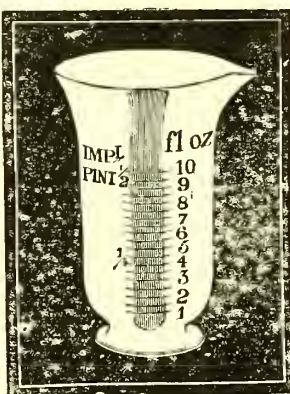
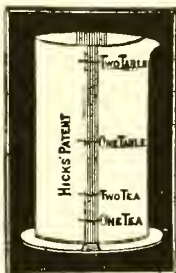
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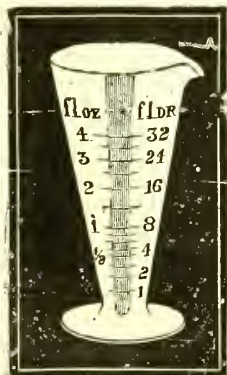
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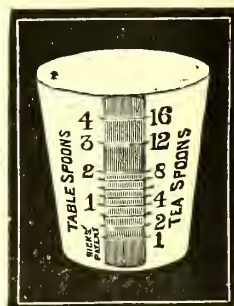
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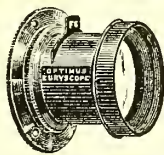
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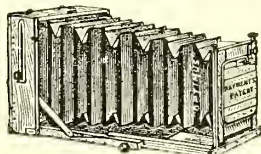
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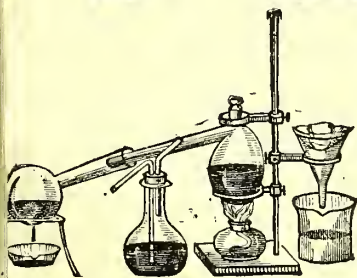
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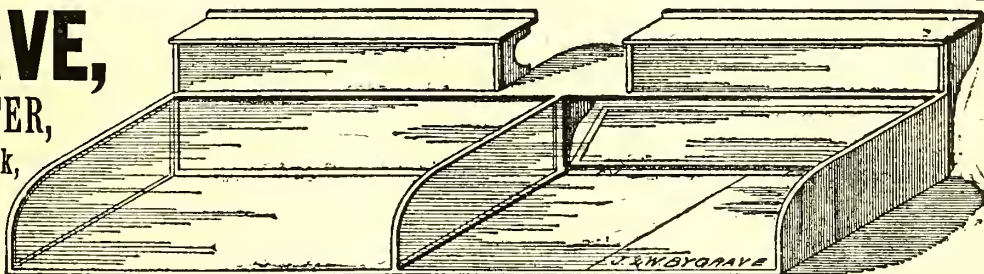
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Ent-top plate-glass Counter Showcase, in French polished mahogany, or ebonized, with  
two upright mirror plate-glass fronted shelves, and table in centre for serving over, and  
mahogany falls at back lined with mirror plate glass, inside fitted with crimson velvet trays—  
15 ft. long, 18 in. wide, 8 in. high (total height 13 in.), £5 10s.; 5 per cent. off for cash.



# EXCHANGE COLUMN.

This section of "The Chemist and Druggist" must be closed for press by Thursday noon of each week. Remittances payable to EDWARD HALSE.

## TERMS.

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of 1d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C., and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

**DEPOSIT OF MONEY.**—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us, accompanied by a commission of 6d. if the amount is £3 or under; and 1s. if over that sum. We acknowledge receipt of deposit to both parties, and hold the money until we are satisfied that either the goods are returned to their original owner or the purchase is completed.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin & Co."

## FOR DISPOSAL.

### Drugs and Chemicals.

1 cwt., or less, of English citric acid, at a low price; best quality. Richardson, Alford.  
Ten 1s. 1½d. Baxter's gont pills, soiled wrappers; offers. Peet-Riley, Chemist, Grimsby.  
28 lbs. gum, 1s. lb., 14 lbs. 1s. 6d. lb., 28 lbs. at 9d. lb.; senna, 2½d. lb.; pmlv. fennigreek, 2d. lb.; camomiles, 6½d. lb. and 1s. 63 Downs Park Road, Hackney, E.

### Apparatus.

Judson's guinea electric bell, complete, 10s. 6d.; D'Or's 24s. electric light apparatus and incandescent globe burner, 10s. 6d. Floyd, Bury St. Edmunds.

### Educational.

Third and fourth edition Martindale's "Extra Pharmacopoeia," in good condition; first offer. Vennall, Cranleigh, Guildford.  
Hanbury's "Pharmacographia," Henfrey's "Botany," Darwin's "Origin of Species," Fowne's "Inorganic," Fowne's "Organic," Bell and Redwood "Progress of Pharmacy," Muter's "Pharmaceutical Chemistry," *Chemist and Druggist Diaries*, 1887, 1888; offers wanted. T. Taylor, 89 Bignor Street, Manchester.

### Literature.

First 15 volumes of the *Pharmaceutical Journal*, well bound, in good condition; 10s. cash. A. Buswell, Lutterworth.

### Shop Fittings.

Four nests mahogany drawers, one counter case; black store bottles. Webb, Calne.  
Centre jar, carboys, tall jars for windows, pill machines, ointment jars; offers requested. Sheriff, Swinfect, Yorks.  
12-ft. run mahogany-fronted drawers and cupboards, glass labels and glass knobs, lockers under, cornice and shelving over, 8½ 10s.; 8 ft. 6 in. plate-glass and mahogany ebonised airtight fronted counter with mahogany top, 6½ 10s.; 4 ft. mahogany dispensing screen and counter case combined, with shelves inside, screen and trays inside case, 3½ 10s.; 6 ft. plate-glass counter case, as Maw's A 18, 5½ 5s.; 8-gallon earboy, cut stopper, on octagon mahogany stand, 25s.; 18 2-lb. blue ointment jars, 25s. the lot; blue ex. pots to match, 5s. doz.; dispensing screens, upright cases, bottles, desks, &c., &c. Note the address—Natali Brothers, 45 Old Street, Goswell Road, E.C.

## Formulae.

Reliable recipes, 6d. each; full set of 130 neatly copied in book, 7s. 6d.; send for list. "Chemist," Edwards, Wye, Kent.

One dozen first-class recipes for articles in daily demand, used in some of the leading English houses; sent post free for 2s. 6d. J. T. Webb, 77 Dover Street, Belfast.

How to make money.—Send 1s. 6d. for any three of the following valuable recipes, easily made, full directions. "Digestive Syrup," vastly superior to Seigel's, more pleasant taking, real medicinal worth, half profit; "Tie Specific," cures instantly when all other remedies fail, acts like magic, without danger; "Embrocatio Alb., " creamy white inseparable emulsion (like Elliman's), equally good for man or beast; "Hop Tonic," better every way than American, grand liver tonic, brilliant, permanent, pleasant, under 1s. pint; "Glycerine Cream," elegant sea-side requisite, cooling and refreshing, preferred to Beetham's, pays splendidly; "Herbalade," concentrated extract like Mason's 6d. bottles, costing half, make 5 gallons of brilliant, sparkling, appetising, thirst-allaying, and comforting drink, once tasted always wanted. T. Brooks, Chemist, Louth, Lincs. My recipes have cost over 200l. List free.

## Miscellaneous.

Twelve doz. pear-shaped syphons, cheap; what offers? Coldwell, Malvern.

1,000 poppy heads, good quality, 5s.; bag 6d. Connor, Doncaster.

Daneer's microscope; good library of science books; owner retiring; will send list. 276/7.

Patent medicines, drugs, and shop fittings; all in good condition; giving up business, 279/10.

"Sloper Keyless Watch," good timekeeper, valued at one guinea; what offers? Hayton, Thorne, Yorkshire.

Superior microscope slides in great variety, 5s. dozen; list; approval. Henry Ebbage, 344 Caledonian Road, London.

Giving up part of trade.—Large lot of surplus stock; list sent on application. Newham & Pickard, Shude Lane, Sheffield.

Percolator, stoneware, 2-gallon, nearly new, 15s. Apply, M'Kee, Chemist, Tunstall, Staffordshire.

Surplus.—Job lines, much under cost, to clear; include drugs, chemicals, patents, and sundries; send stamp for detailed list to Gillman, 5 Wrotham Road, N.W.

Water bed, good condition, 6 ft. by 3½ ft.; also Muspratt's "Chemistry," in two volumes, well bound; what offers. Simms, Chemist, Scarborough.

20 lb. ground indigo, 3s.; 2 cwt. gum senegal, 8½d.; 2 cwt. rape seed, 15s.; 2 cwt. Mawer's dandelion coffee, in ½-lb. tins, stamped, 6s. doz. Harrop, Middleton, Lanes.

## WANTED.

Pessary mould, also chemical balances. 279/37.  
A few trusses, pessaries, and spectacles; cheap. Send particulars and prices. 279/7.

To exchange specie jar, height 22 in., for small carboys. Griffith, Burnham, Somerset.

Large gilt mortar for outside show, with or without lenses. Apply Nelson, Chemist, 37 Morrison Street, Edinburgh.

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A Bracher's mixing machine, with drawer. Full particulars and price to A. Smith, 5 High Street, Newport, Mon.

Plate-glass counter case, as Maw's A 18; must be in good order. State size and price to Todd, Alexandra Terrace, Sunderland.

Attfield's "Chemistry," eleventh; Bentley's "Botany," latest. Kendall, care of Walker, Pharmacy, Blundellsands.

Gray's "Supplement," and two specie jars; quote price. Scholey, Burnham Market, Norfolk.

Two 4-gallon swan-neck carboys, cut stoppers; state price delivered. Sumner, Chemist, Heckington.

Ear syringe; albo-carbon, per cwt.; constant small supplies of German yeast; medical battery or magnet. George Brisley, Bexhill, Sussex.

## Addresses Wanted.

Major R. F. Croker, late of Littlehampton, believed to be now at Brighton. 1s. will be paid for present correct address by Heald, Burnham, Bucks.

London Traveller's Address.—The undersigned will feel much obliged by any Chemist sending them the name of the house George R. Browne (lately representing Messrs. Edge Bros.) is now canvassing for. Hawker Bros., 1 Railway Approach, London Bridge, S.E.



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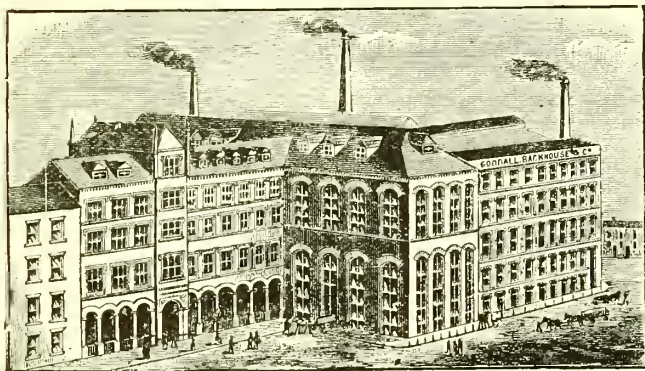
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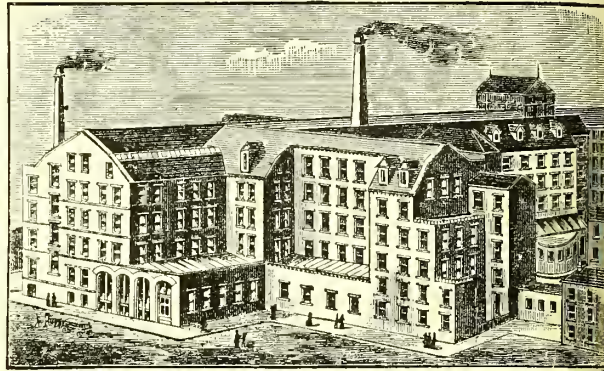
# GOODALL, BACKHOUSE & CO.'S

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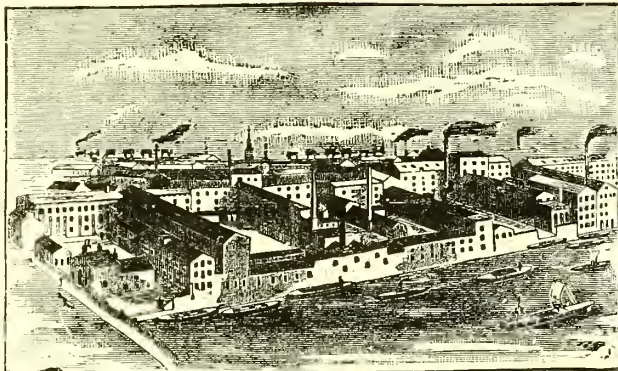
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MAKES THE BEST GINGER BEER.  
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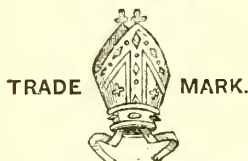
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**TOWER TEA.**—Used by thrifty housekeepers; sold by enterprising agents in every town in the United Kingdom, who find it a profitable Agency.



*Tower Tea*

Registered Trade Marks, Nos. 44,027 and 43,992.

**NOTE.** THE ABOVE TRADE MARKS APPEAR ON EVERY PACKAGE.

**TOWER TEA.**—HUNDREDS OF TESTIMONIALS from all parts of the kingdom speak to the excellent character of this Tea, its popularity with all classes, and the high value of the Agency. A representative selection of these testimonials has been published, and can be had on application, with samples of undermentioned Teas; also the little pamphlet, "A Short History of Tower Tea"; and the book of pictures, "Voyage and Adventures of Ah-Chin-Chin" (1s.).

**TOWER TEA, 1s. 4d. per lb. (retail price)** Sound Wholesome Tea.

**TOWER TEA, 1s. 8d.** " " Powerful Tea, whole and semi-leaf.

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# THE GREAT TOWER STREET TEA CO., LD.

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# CHEMISTS AND DRUGGISTS

DESIROUS OF SECURING

## A VALUABLE AGENCY

SHOULD SELL THE

# "SPRING BLOSSOM" CEYLON TEA.

Read what our Agents say about it, and *notice the recent dates of the following Unsolicited Testimonials,*  
which may be seen on application at our Offices:—

August 13, 1888.—"The Tea is much liked, and always asked for when once tried."

August 7, 1888.—"Will be sold out before the end of the week. I am pushing it all I can."

July 27, 1888.—"I have tried the sample you were good enough to send, and find it an excellent blend."

July 18, 1888.—"I don't want to introduce any other jacket as long as yours please so well."

July 18, 1888.—"It sells well."

June 8, 1888.—"We find the demand increase."

June 4, 1888.—"I find the Tea very good value, and customers like it."

April 30, 1888.—"This Tea seems to take very well in this town."

April 30, 1888.—"I think I shall be able to sell this Tea when its gets known."

April 27, 1888.—"I have now quite a number of customers who get it regularly, and say they prefer it to any other kind."

April 20, 1888.—"It has taken well at my branch, and I think I will try it here too."

April 16, 1888.—"My customers say that it's the best Tea I have had."

April 18, 1888.—"It is only fair to acknowledge the fact that I can get no Tea equal to yours."

April 18, 1888.—"It seems to give satisfaction, as several customers have come the second and third time."

April 13, 1888.—"It is very good, and I wish to say it is the best Tea I ever had."

April 10, 1888.—"Our customers like it and recommend it."

April 3, 1888.—"We have got your Tea started here, and it gives satisfaction to everyone who tries it."

March 31, 1888.—"I find fresh customers every week, and it gives great satisfaction."

March 21, 1888.—"The Tea is liked well, getting fresh customers every day."

February 27, 1888.—"Great inquiries for this Tea."

February 25, 1888.—"I find the Spring Blossom rapidly gaining favour, and gives universal satisfaction."

February 19, 1888.—"All say they never tasted better Tea."

## AGENTS WANTED WHERE NOT REPRESENTED.

Samples and Terms post free (set of Three ¼-lb. Samples post free for 2/), sells Retail at 2/, 2/6, and 3/.

**CAVE, JOHNSON & CO.,** Wholesale Tea and Coffee Dealers, **8 LIME STREET, LONDON, E.C.**

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# UNITED KINGDOM TEA COMPANY,

21 MINCING LANE, LONDON,

Are prepared to entertain a limited number of applications from Traders of undoubted standing to be appointed Agents or the sale of the Company's Teas. A Liberal Commission will be allowed. The Agency will be found to be a valuable one, entailing little, if any, trouble to the Agent, in addition to which it will be the means of bringing numerous customers to him, who will patronise his general business.

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Offices—21 MINCING LANE, LONDON, E.C.

## MILK IN POWDER.

Unsweetened or Sweetened.  
The Cheapest, Purest, and



Most Nutritious of all similar productions.

### A PURE CUP OF TEA

Is obtained in 3 mins. by means of  
**HOBBS' Patent Antitannic Infuser.**

Better Flavour and Less Tea used than with the teapot.

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For Single Cups of Tea  
**HOBBS' INFUSER** is unequalled. Its cost is soon repaid by the saving in the quantity of tea used. Price 1s. 6d. from all China Dealers, Grocers, Chemists, &c., or post free direct, 1s. 6d.

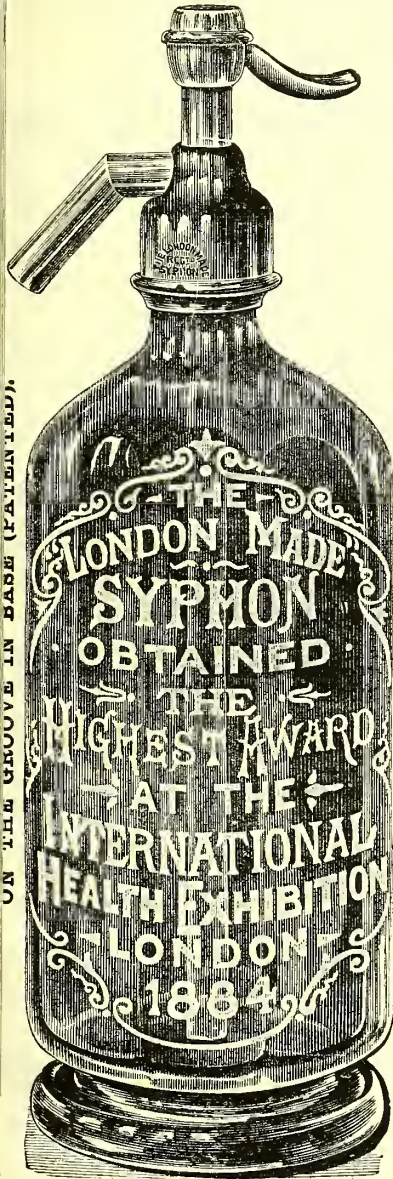
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Obtained the HIGHEST AWARD at the International Health Exhibition, London, 1884.



The high reputation this bottle has achieved is due to the fact of its being in every particular the most perfect yet introduced; and when compared with others in the market it stands pre-eminent. It is most simple in its working parts, therefore the least liable to get out of order; it is the most easily opened, the lightest pressure on the handle being sufficient; it produces a more highly-charged gaseous water than is usually obtained from syphons; it compares most favourably in appearance with any, and the metal top being entirely free from lead, the prejudice against syphon drinks is at once removed, as the liquid passes over pure tin only.

All our Syphons are now fitted at the base with a groove, so that drips from the spout after use are supplied at no extra charge, and will be found of great utility in preventing stains, &c., upon table linen. This is a desideratum long been wanting, particularly for private-house use. Send for sample; forwarded upon receipt of 2s.

NOTE.—Syphons made with our patent foot for collecting excess of liquid dripping from the spout after use are supplied at no extra charge, and will be found of great utility in preventing stains, &c., upon table linen. This is a desideratum long been wanting, particularly for private-house use. Send for sample; forwarded upon receipt of 2s.

Any name, crest, or trade-mark put on the glass by an improved acid process, at from 1s. to 2s. per gross. There is a three-fold advantage in this, as it forms a continual advertisement, is a great ornament, and a preventive of fraud. The plate for engraving costs extra from 5s. upwards, according to the artistic device required.

## PRICES (WHITE, BLUE, GREEN, OR AMBER):—

	By the gross, per doz.	Less than 1 gross, per doz.
Quart size	£1 2 0	£1 4 0
Pint size	1 1 0	1 3 0
Half-pint, Pear shape	1 0 0	1 2 0
Octagonal vases, any colour (including Azure Blue)	1 4 0	1 6 0

Tops, nickel-plated, from 5s. 6d. per doz. extra. Tops, silver-plated and furnished, from 9s. per doz. extra. A charge is made for packing, except when ordered in our patent bin cases (holding one dozen each, price 2s. 6d. each).

Please Note.—B. & F. are the only firm manufacturing Syphons in England that do not supply them filled, and so compete with their customers' trade.

## BARNETT & FOSTER, MINERAL WATER ENGINEERS,

Manufacturing Chemists, and General Providers for the Aerated Water Wine, Beer, and Cyder Trades,

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GOOD  
VALUE

THE GIANT 1d. BOTTLE OF SAUCE.  
LARGEST IN THE TRADE.

In Half-Gross Boxes, at 6/6 per Gross.\*

"BOROUGH" KETCHUP, WORCESTER, HARVEY, YORKSHIRE,  
OR READING SAUCE.

1d. Sample Bottles, dozen parcels	..	..	per gross	5/	extra quality	6/
1d. " " " " " "	..	..	"	5/6	"	6/6
1d. Giant Bottles, dozen parcels	..	..	"	6/	"	8/
1d. " " " " " "	..	..	"	6/6*	"	8/
1/2-Bottles (flat or round), reputed 1/2-pint	..	..	"	16/	"	24/
1/2-Bottles (flat or round), reputed pint	..	..	"	26/	"	32/
1-pint Imperial Round Stoppered Bottles	..	..	"	30/	"	36/
1-pint Imperial	..	..	"	50/	"	60/
12 1/2-gallon Casks (casks free)..	..	..	each	20/	"	32/

## ROYAL CAFÉ SAUCE.

In 8-oz. square-stoppered bottles, 48/ per gross.  
A rich, fruity Sauce of fine flavour, and worth especial attention, as being the most saleable in the market.

Samples of any kind Sent Free of all Cost by

PETER TYRER,  
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## TEMPERANCE BEVERAGES.

A Sixpenny Bottle of

## ADAMS'S EXTRACT OF HERBS

Will make 8 gallons of sparkling, wholesome, and refreshing

### PRIME HERB OR BOTANIC BEER.

Unequalled in strength and richness of flavour by any preparation made from fresh herbs.

The Extract is very carefully manufactured, on the most improved scientific principles, from the herbs and plants gathered and dried at the proper season, when their virtues are in full vigour, thus retaining their invigorating and health-giving properties.

It makes an excellent beverage, giving natural flavour and colour, and a sparkling foam like bottled ale.

In Bottles, 6d. to make 8 gals.; 1s. to make 18 gals.; and  
2s. 6d. to make 50 gals.

## ADAMS'S GINGER ALE ESSENCE

makes a sparkling, refreshing, and invigorating beverage for summer and winter.

## ADAMS'S SPARKLING FOAM PRODUCER.

One tablespoonful added to 2 gallons of the Herb Beer or Ginger Ale, just before bottling, gives a creamy foam like bottled ale.

Wholesale Agents,

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Specially favourable terms to large Buyers from the  
PROPRIETOR,

B. ADAMS, Mansfield, Notts.



TO THE  
**CHEMISTS & DRUGGISTS**  
OF  
**GREAT BRITAIN.**

TELEGRAPHIC ADDRESS: *St. George's, Middle St.,*  
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*December, 1887.*  
**GEORGE'S, NORWICH.**

The Excise Authorities having created a difficulty as to the sale of Medicated Wine containing a certain percentage of alcohol, we obtained in January last, from the Inland Revenue Authorities, permission to sell our Liebig's Extract of Meat and Malt Wine, **WITH QUININE**, without a Wine Licence, and many Chemists not holding a Wine Licence have sold considerable quantities. In order further to meet the requirements of the trade, we have introduced a Liebig's Extract of Meat and Malt Wine, **NON-Alcoholic**, made from the juice of the Grape, Liebig's Extract of Meat, and Extract of Malt. This also can be **SOLD WITHOUT A WINE LICENCE**. Your orders will oblige either direct or through the Wholesale Houses.

Yours obediently,

**COLEMAN & CO., LIMITED.**

*N.B.—The Wine is sold in Bottles, 2/9 and 4/6 each.  
Trade prices on application.*

P.S.—Where the Licence is not held we are willing to pay the entire cost of a Retail Licence (the holder of which can sell any kind of Wines) if an assorted order of 6 dozen is sent us of any of our preparations. List on application. Our Liebig's Extract of Meat and Malt Wine **WITHOUT QUININE** commands a very large sale, and is recommended by over one thousand medical men who have sent us testimonials in its favour.

SOLE MANUFACTURERS—

**COLEMAN & CO., LIMITED,**

**ST. GEORGE'S, NORWICH,**

**AND 3 NEW LONDON STREET, LONDON, E.C.**

**FERRUM REDACTUM BY HYDROGEN**  
IN EVERY PERCENTAGE.

Manufactured by the 'Chemische Fabrik,'

**DR. PAUL LOHMANN,**  
HAMELN, HANNOVER, GERMANY.

**REVOLUTION**  
**IN THE FLY PAPER TRADE.**

It must have been observed that for some time the public have become disgusted with the old poisonous fly paper, and have taken somewhat readily to a sticky sort of substitute.

The advertiser has perfected and patented a Fly Paper of this nature, which will certainly be the leading thing in this way in the future. It is a well got-up and effective paper, and is as cleanly to handle as a sheet of note-paper.

In the advertiser's own retail establishment last season the sale of this was simply enormous, as they were freely used by tradespeople (butchers, bakers, grocers, and confectioners), who would not dare to risk the danger from dead poisoned flies about their stock. Owners of horses and cowkeepers were delighted with them, as they spared the animals the torture from this source.


From the nature of the article it cannot very well be stocked by Wholesale Houses for distribution to the Retail Trade, but the Parcel Post will carry them direct from the maker, and Postal Orders will facilitate remittance.

The price is 4/6 per gross (carriage free), but where a large trade is developed more liberal terms will be given.

Send sample order for small lot, and while the season is on you are bound to do a big thing.

ADDRESS—

**S. WILSON, CHEMIST, ST. HELENS, LANC'S**

**T. & F. J. TAYLOR'S**  
  
**AËRATED WATERS,**  
*Newport Pagnel.*  
ESTABLISHED 1885.

**SODA, POTASH, SELTZER, AËRATED (without Alkali), and LITHIA WATERS, LEMONADE AND GINGER ALE.**

*Each Bottle is protected by a Label bearing the Signature of the Firm.*

Purity and Excellence of the Water certified by Analysis by Professor ATTFIELD, Ph.D., F.C.S.

**HOLLOWAY'S PILLS & OINTMENT**

*Have the Largest Sale of any Medicine in the World.*

MANUFACTURED ONLY AT

Professor HOLLOWAY'S Establishment,  
78 New Oxford St. (late 533 Oxford St.), London,

And sold at 1s. 1½d., 2s. 9d., 4s. 6d., 11s., 22s., and 33s. each Box or Pot

Chemists and Druggists selling "Holloway's Pills and Ointment" can on application to the above address, or to the Wholesale House with whom they deal, be supplied free of charge with Handbills and Posters with their name and address printed at foot.

Wholesale Terms see List of "Proprietary Articles" in most Price Currents.

**SEE INDEX, PAGES 21—23.**



# S. MAW, SON & THOMPSON'S BATH GLOVES, RUBBERS, &c.

	Gloves. (Pairs.)	Straps.	Pads.		Gloves. (Pairs.)	Straps.	Pads.
LEFACIO OR BADEN, No. 1, soft Brown per doz.	5/4 & 6/0	9/0	5/4	HONEYCOMB, White. per doz.	5/4	9/0	5/4
LEFACIO OR BADEN, No. 2, hard Brown . . . per doz.	6/0	9/0	5/4	REVERSIBLE, No. 1, one side soft Brown, the other best White Turkish . . . per doz.	6/8	11/0	5/4
LEFACIO OR BADEN, No. 3, soft Brown, assorted patterns, per doz.	6/6	9/0	5/4	REVERSIBLE, No. 2, one side hard Brown, the other White Honeycomb . . . per doz.	6/8	11/0	5/4
LEFACIO OR BADEN, as- sorted patterns, export quality, per doz.	4/0	(Red labels)		REVERSIBLE, No. 3, one side Egyptian Loofah, the other best White Turkish, per doz., single	4/0	13/0	—
LEFACIO (the U.S.), Striped soft Brown . . . per doz.	6/6	9/0	5/4				
TRKISH THIN WHITE GLOVES, per doz. pairs,	2/9 & 3/-			PADS, per doz.	3/6		
Ditto Best Quality		4/9 & 6/-					5/-

SPECIAL QUOTATIONS TO WHOLESALE BUYERS.

## S. MAW, SON & THOMPSON'S SUPERIOR QUALITY WATERPROOF CHECK SPONGE BAGS.

No. 1	2	3	4	5	6
7×6	8×7	9×8	10×9	11×10	12×11 inches.
6/0	7/0	9/0	11/0	12/6	16/0 per dozen.

For other descriptions see Quarterly Price Current, page 84.

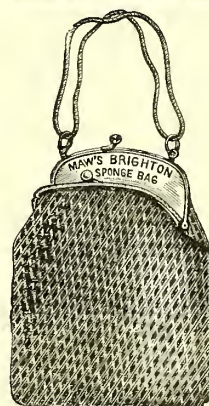
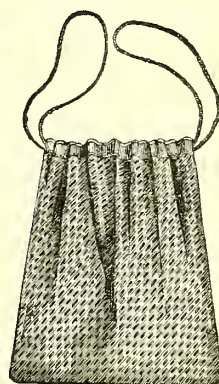
## S. MAW, SON & THOMPSON'S BRIGHTON SPONGE BAGS,

WITH BALL CLASP FASTENINGS, NICKEL-PLATED.

No.	2	3	4	5	6
	8×7	9×8	10×9	11×10	12×11 inches.
ECK...	16/0	18/0	20/0	26/0	28/0 per dozen.
ISLEY	18/0	20/0	22/0	28/0	32/0 "

SPECIAL QUOTATIONS TO WHOLESALE BUYERS.

7 to 12 ALDERSGATE STREET, LONDON.



THE BRIGHTON  
SPONGE BAG.



# THE BEST NATURAL APERIENT.

Persistent attempts are made by interested parties to deceive the public by offering Natural Mineral Aperient Waters with marks, names, and designations very similar to those which are used by the **APOLLINARIS COMPANY (LIMITED)** upon the **NATURAL MINERAL APERIENT WATERS** imported by them.

Under these circumstances the **APOLLINARIS COMPANY (LIMITED)** feel compelled to caution the public that the **HUNGARIAN BITTER WATER** sold by the **COMPANY** always bears the name of the **APOLLINARIS COMPANY (LIMITED)** on the Label, and a **RED DIAMOND**, which is their **TRADE MARK** of Selection.

**DEMAND THE DIAMOND MARK,**

and insist upon receiving the **HUNGARIAN APERIENT WATER** of the **APOLLINARIS COMPANY (LIMITED)**.

146 MINORIES, LONDON E.C.  
New York  
Sydney  
&c.

**SODA WATER MACHINERY**  
AND ALL ACCESSORIES FOR THE TRADE

**BRATBY & HINCHLIFFE**  
HEAD OFFICE  
SANDFORD ST. ANCOATS, MANCHESTER

BOXES BOTTLES, MACHINERY  
ESSENCES  
Catalogues, Circulars, Testimonials  
Post Free

# FLATNESS OF TASTE

SO COMMON IN FILTERED WATER,

**OBVIATED**

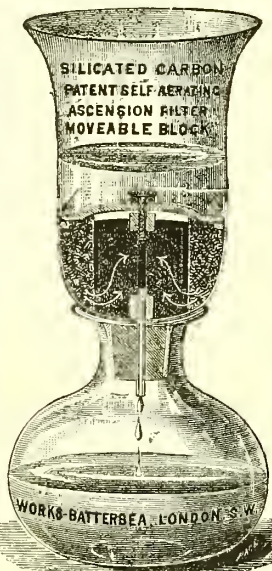
BY USING

**SILICATED  
CARBON  
FILTERS  
AERATED**

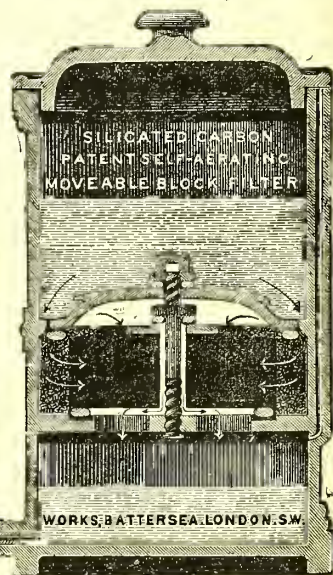
By means of which the water is Aerated and Filtered simultaneously, rendering it, even after boiling, Pure, Bright, and Palatable.

The Silicated Carbon Block can be Instantly Removed, leaving the whole of the Filter Open for Inspection and Cleansing.

LIBERAL DISCOUNT TO THE TRADE.



Glass Table Filters.



Domestic Filters.

LIBERAL DISCOUNT TO THE TRADE.

FOR PRICES AND FULL PARTICULARS, WRITE TO THE  
**SILICATED CARBON FILTER CO., BATTERSEA, LONDON, S.W.**



For BRITISH PHARMACOPŒIA, THROAT HOSPITAL, and every variety of  
**MEDICATED LOZENGES,**  
 JUJUBES, COMPRESSED TABLETS, BOILED SWEETS,

Of High Quality, for sale by CHEMISTS, apply to

**T. BAGE BLYTON & CO.**

Manufacturing Pharmaceutical Chemists, Lower Broughton, MANCHESTER.

CHEMISTS' OWN FORMULÆ ACCURATELY MADE UP AND NAME STAMPED UPON 7 lbs. AND UPWARDS.

PRICE LISTS UPON APPLICATION.

SOLE PROPRIETORS OF

**F W E M L O W ' S C H L O R O D Y N E .**

Registered Telegraphic Address—"TROCHES MANCHESTER."

**LIQUID PEPTONATE OF IRON (STERILIZED)**

The best remedy for Anaemia and in all cases where the stomach cannot bear iron in the ordinary forms. A wonderful stimulant to nutrition.

**COLOURLESS PEPTONE OF MEAT (STERILIZED)**

The only rational Peptone, free from microbes. Antibacteridian sterilization insures its complete preservation.

SAMPLES FREE TO MEDICAL MEN AND CHEMISTS ON APPLICATION.

Sole Makers: DENAEYER'S PEPTONES COMPANY, LIMITED, 118 Bishopsgate St. Within, LONDON, E.C.

**ROBERT GIBSON & SONS,**

MANUFACTURERS OF HIGH-CLASS LOZENGES OF EVERY DESCRIPTION,

JUJUBES, BOILED SUGARS, COMPRESSED PELLETS, &c., &c.

Shipped through London Houses to all parts of the World. Price Lists sent on application to the Works,

ERSKINE STREET, HULME, MANCHESTER, ENGLAND.

LONDON DEPOT-1 AUSTRALIAN AVENUE.

**VALUABLE & INTERESTING TO EVERYBODY.**

**COMPRESSED HOPS.**

Best Hops compressed into small parcels of one pound and half-pounds, and sent out in cases containing 30 lbs. each. These Hops are specially selected and compressed for keeping purposes, and will retain their aromatic strength for a considerable time.

They are introduced to the Public to enable them to make their own BITTERS, YEAST, HOME BREWING and numerous other purposes. Full particulars given on each packet.

*P.S.—Chemists will naturally see the great advantage in making their own Bitters from the Pure Hop itself.*

Specially Packed by **A. WILKINSON & SONS, 27 Derby Lane, Old Swan, LIVERPOOL.**

SAMPLES AND QUOTATIONS ON APPLICATION.

Sole Agents for Chemists—EVANS, SONS & CO., Liverpool; EVANS, LESCHER & WEBB, London; EVANS, SONS & MASON, Lim., Montreal.

AN OLD SAW WITH NEW TEETH.

**SELL FLY CATCHERS WHILE THE FLIES ARE OUT!**

If you would like a bit of roaring trade, tackle

**WILSON'S STICKY FLY PAPERS,**

As advertised in this journal. Their sale just now is fast and furious! Drop a card and you shall be fixed up sharp, and we can square up at the end of the harvest. You pay only for what you sell.

**THESE FLY PAPERS WILL FETCH 'EM! CATCH 'EM!! AND KEEP 'EM!!!**

**"RAMORNIÉ." LIEBIG'S Extract of Meat.**

As supplied to the War Office.

1-lb. Jars .....	per lb.	6/2	.....	per doz.	74/0	2-oz. Jars .....	per lb.	7/0	.....	per doz.	10/6
1-lb. Jars .....	"	6/4	.....	"	88/0	1-oz. Jars .....	"	7/8	.....	"	5/6
4-oz. Jars .....	"	6/7	.....	"	19/9	3-oz. Jars .....	"	8/0	.....	"	8/0

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.C.

6 lbs. Carriage Free.



# HAY'S HOP ALE ESSENCE

REGISTERED TRADE MARK.

FOR THE MANUFACTURE OF THE FINEST AERATED HOP ALE.

Is made from the Choicest Hops Grown.

## HAY'S HOP ALE ESSENCE

"Supplies an excellent  
stomachic, appetising, and  
agreeable summer drink."

*Brewers' Journal.*

"A beautiful es-  
sence, has a fine Hop  
Aroma, and is quite a  
pharmaceutical triumph."

*The Chemist and Druggist.*

"For this Essence a bril-  
liant future may be anti-  
cipated. It possesses charac-  
teristics very seldom to be  
met with."

*Mineral Water Trade Review.*

"For flavour, strength, and  
real solubility, this Essence  
leaves nothing to be desired."

*British & Colonial Druggist.*



TRADE MARK

REGISTERED.

## HAY'S HOP ALE

"This is an excellent Non-  
Alcoholic beverage."

*The Lancet.*

"Evolves a delicious aroma  
of Hops."

*Medical Press.*

"It is a Fine Bitter  
Beer, pouring out with a  
rich creamy head."

*British & Colonial Druggist.*

"Possesses the Aromatic  
bouquet and pleasant flavour  
of the genuine Hop."

*Mineral Water Trade Review*

"Is a nearer approach to  
Bass or Allsopp's Ale than  
any non-intoxicants preced-  
ing it."

*Eastern Morning News.*

Trade Price, 8s. 6d. per lb.; 12 lbs. and upwards, 8s.

Quantity required, two fluid oz. to each gallon of Syrup, making 106 10-oz. Bottles.

# HAY'S HOP ALE ESSENCE

FOR THE MANUFACTURE OF THE FINEST AERATED HOP ALE.

"Since Mr. HAY, the well-known Manufacturing Chemist, of Hull, surprised the Pharmaceutical world, some ten years since, by the production of that, until then, had been thought an impossibility, viz., a perfectly soluble and transparent ESSENCE OF GINGER, nothing he has done has attracted so much attention in this direction as his latest ESSENCE OF HOPS, which, like his other Essences, is a production unique in itself. The HOP ALE made from this Essence evolves a DELICIOUS AROMA OF HOPS, and supplies that much longed-for desideratum of abstainers, 'A Glass of Non-Alcoholic Beer.' We have always felt that teetotallers laboured under a disadvantage that ought not to exist, in having no really decent beverage in the place of Wine and Beer. By this Pharmaceutical triumph of Mr. HAY, this difficulty has been overcome, and it affords us much pleasure to commend this truly Temperance Drink to the notice of abstainers and non-alcoholic abstainers alike."

—*Medical Press.*

## HAY'S HOP ALE ESSENCE [1]

"I certainly remarkable for the purity and reality of its results. Made from the choicest hops, and treated in a manner of which Mr. HAY appears to possess the monopoly, this HOP ALE ESSENCE supplies an excellent stomachic, and an agreeable stimulating Summer Drink. The HOP ALE produced by this ESSENCE is of a most refreshing and invigorating character, with all the appetising flavour and delicate aroma of its more intoxicating prototype, which it approximates more closely than any similar preparation we have yet tasted. It may be advantageously taken up as a speciality for which a large consumption may safely be predicted."—*Brewers' Journal.*

**W. HAY, Manufacturing Chemist, Beverley Road, HULL,  
ENGLAND.**



Telegraphic Address—CHEMICUS LONDON.

**ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."**

Foot of page		Foot of page		Foot of page	
A 1 BRAND MENTHOL CONES	43	GIBSON, R., & SONS	19	OLDFIELD, PATTISON & CO.	7
ADAMS, B.	Herb Beer Extracts	GOODALL, BACKHOUSE & CO.	Confectionery	Butter Coloring, Extract of Herbs, Es. once of	3
ALLEN & HANFORD	Phosphoric Salts	HOUSEHOLD SPECIALTIES	10	ORME & CO.	Scientific Apparatus
APOLLINARIS, THE, CO.	Thunbergian Janos	GOLDSCHIEDER, EDWARD	Artificial Purview Stone	PEAKE, ALLEN & CO.	Foreign
ARMBRECHT, NELSON & CO.	Coca Wine	GT. TOWER STREET TEA CO.	Innocation	PERREN, SON & RAYMENT	32
AUSTRALIAN DRUG CO.	30	GRINDLEY & CO.	Petrochem Jelly	PETERSON, M., & CO.	Spangles
AUSTRALIAN MEAT CO.	"Ramonie" Extract of Meat	HARDY PATENT PICK CO. (LIM.)	"Devil" Disintegrator	PHILLIPS, G., & CO.	Spirits of Wine
BAILEY, C. J., & CO.	Indiarubber Brush	HARGREAVES, DR.	A Practical Manual of Venereal and Generative Diseases	PITCHETT, W. E.	Books
BAILY, J.	"A Physician's Pharmacopoeia"	HARKER, STAGG & MORRIS	Wholesale Druggists	QUIBELL, BROS.	Disinfectant, Emp. Adhesiveum Opt.
BANNER, E. R.	East India Oil of Mustard Seed	HAY, W.	Hop Ale Essences	QUILLIAM, J., & CO.	49
BALLET & FOSTER	Vanilins	HAYWOOD, J. H.	Surgical Appliances	RAIMES & CO.	Breast Exhauzers
BATES, F. W.	Frisette and Sulphur Salt	HICKS, J. J.	Opape Glass Measures	RAIT, G. L.	Analytical
BEDZELER, J., & CO.	Annett's Cough Balsam	HOBBS INFUSOR CO.	Antianic Tea Infuser	RICHFORD, E. M.	Rubber Stamps
BENNETT & JENNER	Chemicals	HOLLOWAY, PROFESSOR	Pills and Liniment	RIVERHEAD OIL MILLS CO.	Ground Nut African Oil
BERKELEY, TAYLOR & CO.	Wholesale Druggists	HOOPER, W., & CO.	Ca. nabyra and Seltzer Water COVER	ROBBINS, J., & CO.	Drugs
BISHOP & WARDEN	Cork Sacks	HORN & SON	Patent and Trade Mark Agents	ROBERTSON, J., & CO.	Pill Coating Machine
BLYTON, T. BAGE, & CO.	Confectionery	HOBBS, A.	Kamplax	ROBINSON, B.	Pharmaceutical Sherry Wine
BOWERS BROS.	Printing	HUNYARD JANOS	Waters	ROBINSON, SONS	Wholesale Druggists
BOWLING & GOVIER	Dispensing Counter	IDRIS & CO.	Pure Crushed Linseed	ROCHE, TOMPITT & CO.	Perfumery
BRACHER & CO.	Refort Stand and Filt ring	JAMES, DR. PROSSER	Guide to the New B.P.	SANGER & SONS	Druggists' Sundries
BRAMWELL, E., & SON	Stool, Fil Finisher and Distilling Apparatus	JEWELL, BROWN & JENNINGS	NATURAL WATER	SANTAS, THE, CO.	Disinfectant TEXT
BRATBY & HINCHLIFFE	Glauber and Epsom Salts	JOHN, J. H., & S.	Mustard Seed Oil	SEABURY & JOHNSON	Plasters, Notice of Address
BURROUGHS, WELLCOME & CO.	Soda-water Machinery	KEARLEY & TONGE	Mitre Tea	SELF-OPENING TIN-BOX CO.	Boxes
BYGRAVE, J. & W.	Shoph Fitters	KEENE, ASIWEILL	Concerted Meds	SHIPKOFF & CO.	Oil of Rose
CADBURY BROS.	Cocoa COVER	KEITH, B., & CO.	American Concerted Meds	SHIRLEY, A. W.	Menthol Cones, &c.
CATTLE MENTHOL CO.	Ceylon Tea	KEMP THORNE, PROSSER & CO.	Wholesale Druggists	SILVERDA VARIOUS FILTER CO.	Filters
CENTRAL SCHOOL OF PHARMACY	Nursery Food Lamps	KILNER BROS.	Feeding and Dispensing Bottles	SMITH, T. H., & CO.	Drugs
CLARKE, S.	Oil of Peppermint	KINDERLEY & JOHNSON	Caution re Trade Marks	SOLFOPT BR'S.	Flesh Gloves
COCKING & CO.	Oil of Peppermint	LENNON, B. G., & CO.	Foreign Chemists	SOUL, W. H., & CO.	Foreign Agency
COLEMAN & CO.	Leibig's Meat and Malt Wine	LIVERPOOL SCHOOL OF PHARMACY	4	SOUTHAL BROS. & BARCLAY	Line-water Siphons
COLE, W.	Insect Powder in Bellows	LOFTHOUSE & SALAMER	Drugs	SPIRONE, THE, CO.	Siphons
CORRIST & HARDING	Oil, Fat, &c.	LOHMANN, DR. PAUL	Ferrum reduction by Hydrogen	SPRATTS PATENT	Dog Medicines
CORRAN, J. R.	Shop Fittings	LOISETTE, PROFESSOR	4	STEINER & CO.	Vermi Killer
CRITCHLEY, T.	Starch Glasse	LONDON HOMEOPATHIC HOSPITAL	4	STEPHEN, SMITH & CO.	Spirits of Wine
CROWN PERFUMERY CO.	Finest English Perfumery	LYNCH & CO.	L. Brand Dispensing Bottles COVER	STERN, G. & G.	Panthein
DAIL'S AGENCY	Dahl's Cakes	MACK H.	Pasta Mack	SWANN, H. H.	The "Alpha" Syringe COVER
DAY & SONS	Horse and Cattle Medicines	MACK, J.	Pine Products	SWANN, H. H.	Dr. Churchell's Syrup of Hypophosph.
DAY, SON & HEWITT	Cattle Medicine Chests	McKENSON & ROBBINS	Pills	SWIFT SPECIFIC CO., THE	Blood Purifier
DEAENEYER'S PEPTONES CO. (LIM.)	Colourless Peptone of Meat	McMAIR, J. & B., & CO.	Shellac, Gums, &c.	SWISS MILK CO.	Milk in Powder
DE ST. DALMAS & CO.	Flatters	MANFREDI SCHOOL OF CHEMISTRY	4	TAYLOR, T. & F. J.	Evbrated Waters
DENNIFORD & CO.	Fluid Momesia	MAY & BAKER	Medicinals, Ethers, Sulfonal Boyer COVER	TOMLINSON, T., & SONS	Valuers. Coloured Sup.
DOWNING, B. I. P. CO.	Eucalyptus Globulus	MOODY, S. W.	Glycerine and Camphor Cream	TREAT, R. C.	Perfumery
DOWNING, J. S.	Toilet Paper	MUMFORD, G. S.	Pure Starch Powder	TYRRETT, R. C.	Sauces and Ketchup
DOY BOYER, MARIE	Toilet Specialities	MUTER, DR.	Short Manual of Analytical Chemistry	UNITED KINGDOM TEA CO. (LIM.)	Tea
DURANT, G., & CO.	Perfumes	NATALI, E.	Shop Fitter	VACCINE ASSOCIATION	Pure Vaccine Lymph
EDINBURGH CLASSES	4	NEWBURY & SONS	Pills	VAN HOUTEN'S COCOA	29
EDWARDS & SON	Patent Medicines	NEW CARBOLIC SANITARY CO.	Disinfectant, Healthites	VOGELER, THE CHARLES A. CO.	St. Jacobs Oil
ELLIAM, SONS & CO.	Embrocation	NEWSOME, C.	Surgeons' Lint	WARRICK BROS.	Essential Oils, Perfumery
EMPLOYERS' LIABILITY ASSURANCE CO.	3	OLDFIELD, PATTISON & CO.	Butter Coloring, Extract of Herbs, Es. once of	WARRINGTON, G., & SONS	Sealing Wax
EVANS, SONS & CO.	Druggists' Sundries	ORME & CO.	Scientific Apparatus	WELLS, G.	A Specific Disease, A Cause of Baldness
EVANS, LESCHER & WEBB	London COVER	PEAKE, ALLEN & CO.	Foreign	WEST, T.	Mona's Ocell Bouquet

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear above are published in one of the other issues of this month.

**BEE SW & HONEY BOTTLES**

Bowdlear and Co.	Barnett and F
	Barrett, R. H.

**SISMUTH. PREP.**  
Hearon, Squire and Francis  
Hewlett and Sons  
**HOWARDS AND SONS**  
May and Baker  
Swines and Co.  
White, Alfred and Sons

**BOTANIC BEER**  
Newball and Mason

**BOOKS**  
Baily, J.  
Churchill, J., and A.  
Dr. Davies, Dr.  
James, Dr. Prosser  
Keene and Ashwell  
Laisette, Professor  
Pritchett, W. E.  
Robinson, G. H.  
Wells, G.  
Wright, J., and Co.

**BRUSHES**  
Bailey, C. J., and Co. (Toile  
India Rubber)  
Dikens and Co.  
Goodall, H. A. and Co. (Tooth)  
Sutton, O., and Co. (Tooth)

**BLOOD MIXTURE**  
Beedzler, J., and Co.  
Lincoln and Midland Count  
Drug Co.

Maw, Son and Thompson  
**CARMINE**  
Bnsh, W. J., and Co.  
Sellers  
**CASC. SAGRADA**  
Duncan, Flockhart and Co.  
Squire and Sons  
Evans, Sons and Co.







**PLASTER**

lather, W.  
 lath, Son and Thompson  
 Williams, J., & Co.  
 t. Dalmass, A. J. e  
 laury and Johnson  
 mith, W. F.  
 Thompson, M. F.  
**ILLS (Coated, &c.)**  
 Allen and Hanburys  
 eecham, Thomas  
 Evans, Sons and Co.  
 eason, Squire and Francis  
 Hill, A. S., and Sons  
 looper, Dr.  
 ormer and Co.  
 eKesson and Robbins Ovoid-  
 capped  
 ewbery and Sons  
 anger, J., and Sons  
 mith, W. F.  
 onthall, Bros. and Barclay  
 wann, H. H.  
 Varner, W. R. (Coated)  
 Vrijs and Co.

**ILL MACHINES**

law, Son and Thompson  
 eader, J. W.  
 oberston, J., and Co. (Coating)  
 ogoood, W. (Coater)

**INE PRODUCTS**

nrroughs, Wellcome and Co.  
 ack, Joseph  
 tern, G. and G.

**ODOPHYLLIN, &c**

leith, B. and Co.  
 mith, T. and H.

**ORCELAIN GDS.**

oths, H., and Co.  
 ogoood (E.c. Pots, regist.)

**OLISHING**

aumgartner (La Brillantine  
 reddy, Bourdass (Albatam)  
 ark, W.  
 akey, John, and Sons

**PRINTING**

ell and Stone  
 ivers Bros.  
 eesimile Apparatus Co.  
 ord, Shaolana and Co.  
 liverlock, H. (Exeter)

**UMICE STONE**

oldscheider, E. (Artificial)

**UMILINE**

tern, G. and G.

**UTININE SALTS**

lellgers, F. W., & Co.  
 towards and Sons  
 nbn, B.  
 scar Andree and Co.  
 immermann

**RENNET**

Benger's (Essence of)  
 Duncan, Flockhart and Co.  
 Johnson and Jorgensen  
 Oldfield, Pattinson and Co.

**SACCHARIN**

Allen and Hanburys  
 Burroughs, Wellcome and Co.

**SALICINE**

Macfarlan and Co.  
 Smith, T. and H., and Co.

**SALOL**

Kuhn, B.

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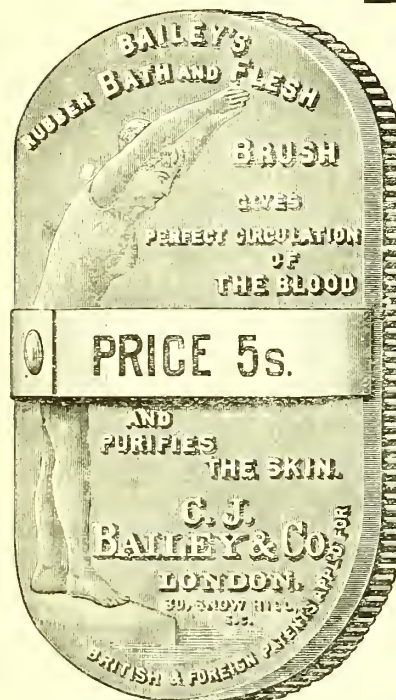


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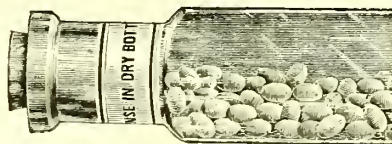
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(FROM "MODERN TRUTH.")

THE great success and popularity of an article has now been confirmed by a Post Card Competition inaugurated by that old, well-known, popular, and influential paper, THE CHEMIST AND DRUGGIST, a copy of which reaches each week nearly, if not quite, every dealer in medicine in the United Kingdom and the Colonies, besides having a large circulation on the Continent and in the United States. The publishers of this paper recently conceived the idea of ascertaining from the Trade the most popular preparation for outward application now being manufactured and sold. With this object in view, they invited a Post Card Competition, each dealer to name on said post card the preparation for outward application which was most popular with his customers. The publishers received 635 post cards, with the following results:—

St. Jacobs Oil .....	384	Bow's Liniment .....	7
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while eight other outward applications had one vote each.

It will thus be seen that St. Jacobs Oil was named by 384 different dealers as being the most popular remedy sold for outward application, leaving 251 (less than half), to be divided among fifteen other remedies; showing conclusively, if further evidence were wanted, that St. Jacobs Oil to-day stands pre-eminent among all other proprietary medicines for outward application. In fact the sales of St. Jacobs Oil are more than double those of any other proprietary medicine in the world, and ten times greater than those of all other liniments and embrocations.

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If there should be any of our readers who have never used St. Jacobs Oil we most strongly advise them to procure a supply in case it should be required. We believe that it is the most valued, and possesses the greatest merit of any preparation for outward application ever offered to the public.



# TABLOIDS.

LONDON]

[1888.

## "Tabloids."

Medically, the demand of the age is for medicines which do not unnecessarily offend the palate, smell offensive, or derange the stomach. There is also required more uniformity, greater accuracy, and perhaps safer methods in the administration of drugs. Repeatedly has it been urged that to punctiliously regard the palate in health, and as studiously disregard it in disease, could have no possible foundation in reason or common sense, and beyond a doubt the leading men of the profession are of one opinion on this subject. If a fastidious patient be annoyed every time she has to take her medicine, it may not be long ere she changes doctors. In the case of children, successful medication must largely depend upon the form in which medicines are given. Compressing a youngling's nose, holding the head between the knees, whipping or otherwise forcing it to take a nauseous mixture are hardly measures conducive to the welfare of a sick child. There is no gaining by the fact that agreeable medication only should be adopted with young children, no matter what may be the opinion with regard to adults. No one likes to have the palate offended—especially in sickness—with bad-tasting drugs, any more than one likes bad odours or the prick of a pin. To a delicate child even the prick of a pin may be quite as acceptable as a nauseous, malodorous medicine. *Verbum sat sapienti.*

The Tabloids present many and very substantial advantages over all other forms of medicines yet introduced. First of all, they are made with the pure drug only, and are not contaminated with needless and objectionable excipients. They do not, therefore, like pills, change their condition and become insoluble with time; nor do they, on the other hand, crumble like the imitations do, care being taken to compress them with sufficient force to prevent their falling to pieces.

The "Tabloids" are compressed "hard and soft," due regard being paid to the purpose for which they are to be used. Those designed for dissolving in the mouth, like Chlorate of Potash, Chlorate of Potash and Borax, and Voice Tabloids are made very hard; while those destined for internal administration are less dense, and quickly disintegrate, such as Bismuth Subnitrate, Manganese Dioxide, Charcoal Tabloids, &c. Others of the more lightly compressed Tabloids dissolve with the greatest readiness: for example, the soluble Quinine Bisulph. dissolve almost as quickly as they touch the water, and it may be observed incidentally that this renders them infinitely cheaper than, and preferable to, the ordinary Quinine, which is so insoluble that every part requires 740 parts of water to dissolve it. The Sodium

Bicarbonate "Tabloids" are as pure and active as this salt can be, a sufficient dose of it not failing to relieve a "Sour Stomach." The Potassium Bicarbonate "Tabloids" are likewise an eligible preparation, pure and reliable—this salt, as is well known, enjoying precedence over Sodium Bicarbonate in those cases where the "acidity of the stomach" is ever recurring and chronic. This is the salt par excellence in the indigestion from fatty acids, to alkalise the urine, and eradicate the causes of "chronic acidity."

There is an old adage that Soda is the salt for the Liver, and Potash for the Kidneys. Certain it is that for whatever purpose required, the Soda and the various Potash Tabloids do their work well.

The salient points of the "Tabloids" are many, but not one of them is more important than the one that they are easy to swallow. The reason of this is obvious. Not being spherical, but lenticular, they do not roll about the mouth and stick in the throat like pills. Who cannot recall his own experiences when as a child he tried repeatedly and almost in vain to swallow a pill? Had our forefathers made a pill of any other shape than round, they would have facilitated a thousandfold the taking of medicine by patients. It requires much experience for a tongue to handle a pill, and a peculiar knack to get it down! The most difficult form of drug to swallow is a pill.

The "Tabloids" furnish all the advantages of pills, and none of their disadvantages. They are portable, easily carried in the waistcoat pocket, and can be taken while following the daily avocations. A most noteworthy feature about them is that accidents are not apt to happen, for the dose of each is accurately apportioned.

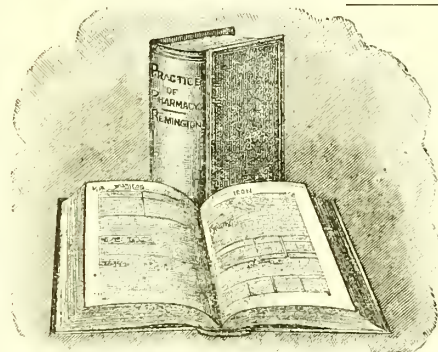
## LIST OF TABLOIDS.

Ammon. Bromide, 5 and 10 gr.	{ Quinine Sulph., 1 gr.
Ammon. Chloride, 3, 5, and 10 gr.	{ Arsenic, 1/30 gr.
Ammon. Chloride with Borax.	{ Strychnine, 1/30 gr.
Antifebrin, 2 gr.	Rhei Comp., 3 gr.
Antipyrin, 5 gr.	Rhei and Magnesia, 5 gr.
Bismuth Sub-nit., 5 and 10 gr.	Rhei and Soda, 5 gr.
Caffein Citrate, 1 gr.	Rhubarb, 3 gr.
Cascara Sagrada Ext., 2 gr.	Saccharin, 4 gr.
Cathartic Comp. U. S. P.	Salol, 2 gr.
Charcoal, 5 gr.	Soda Bicarbonate, 5 gr.
Chloral Hydrate, 5 gr.	Soda Chlorate, 5 gr.
Chloramine.	Soda Chlorate and Borax, 5 gr.
Cinchonidine Salicylate, 2 gr.	Soda-Mint.
Cocaine with Potash and Borax.	Soda Salicylate, 3 and 5 gr.
Ipecac. and Opium (Dover Powd.), 5 gr.	Soda Sulpho-carbolate, 5 gr.
Ipecac. Powder, 5 gr.	Sodium Bromide, 5 and 10 gr.
Iron and Quinine Cit., 3 gr.	Sodium Iodide, 5 gr.
Laxative Vegetable.	Strophanthus, 2 minims of Tinct. in each.
Lithia Carbonate, 2 gr.	Tannin.
Manganese Dioxide, 2 gr.	Test Tabloids.
Nitro-Glycerine.	{ Fer. Pyrophos., 2 gr.
Pepsin Pure (Fairchild).	{ Quinine, 1 gr.
Pepsin Saccharated, 5 gr.	{ Strychnine, 1/100 gr.
Peptonic.	Trinitrine (Nitro-glycerine), 1/100 and 1/50.
Potash Bicarb., 5 gr.	Trinitrine and Ammon. Nitrite.
Potash Chlorate, 5 gr.	{ Nitrite of Amyl, 4 gr.
Potash Chlorate with Borax, 5 gr.	Trinitrine Comp. { Capsicum, 1/50 gr.
Potash Nit. (Sal. Prunella), 5 gr.	{ Menthol, 1/50 gr.
Potash Permanganate, 1 and 2 gr.	
Potassium Bromide, 5 and 10 gr.	Urethane, 5 gr.
Potassium Iodide, 5 gr.	Voice (Potash, Borax, and Cocaine).
Quinine, 1, 2, 3, and 5 gr.	Zinc Sulph., 1 gr.
{ Quinine Sulph. 1 gr.	Zinc Sulpho-carbolate, 2 gr.
{ Ferri Redact., 1 gr.	Zymine Tabloids.
{ Arsenic, 1/30 gr.	Zymine Comp. Tabloids.
{ Strychnia, 1/30 gr.	

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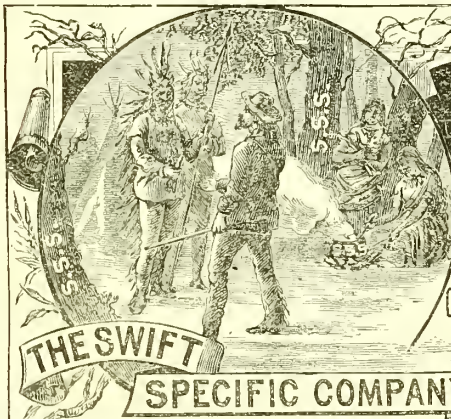
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(Copies may be obtained at the London Office, 42 Cannon Street, E.C., 6d. each, or the journal will be supplied to extra-Australasian subscribers at 5s. per annum.)

#### POST-CARD COMPETITION.—No. 8.

WE invite post-card communications on any of the hundred subjects named on pages 158, 159, and 160 of THE CHEMIST AND DRUGGIST, August 4, and for the best we offer the usual prize of one guinea. Competitors may write their essays on one, two, or three post-cards. Subscribers or their employes only are eligible to compete, and all essays must reach us before August 31.

MR. H. V. DAKERS, who will leave England next week for New York, will in future undertake the representation of THE CHEMIST AND DRUGGIST in the United States. His permanent address will be announced subsequently. For the present letters addressed to him at the Metropolitan Hotel, New York, will have attention.

MR. F. W. BRIDGES, one of the publishers of *The Chemist and Druggist of Australasia*, will make a tour through the United States, from San Francisco to New York, in the autumn. He will be glad to call on American firms en route who wish to talk with him concerning the drug business in the Australasian colonies, and those who wish to have an interview with him should address letters to the care of Messrs. John Taylor & Co., 112 to 120 Pine Street, San Francisco, Cal., or to the care of Mr. C. F. A. Hinrichs, 29 Park Place, New York.

THE LEAVING CERTIFICATE OF THE SCOTCH EDUCATION DEPARTMENT.—It is announced that the Royal College of Surgeons of Edinburgh, the Pharmaceutical Society of Great Britain, and the Council of the Society of the Solicitors before the Supreme Courts have expressed their willingness to accept the leaving certificate of the Scotch Education Department for so much of the preliminary examinations imposed by these societies as is covered by the certificates possessed by intending candidates.

SIR MORELL MACKENZIE is at work on his reply to the recently published attack upon him by the German physicians. His answer will be shortly published in book form simultaneously in England and Germany. Messrs. Sampson, Low, Marston & Co. will be the English publishers. A considerable portion of it will be in the nature of personal anecdote by Sir Morell respecting his illustrious patient, the late Emperor Frederick. Facsimiles of the Emperor's notes will be included.

#### PARLIAMENTARY NEWS.

THE Pharmacy Act (Ireland) 1875 Amendment Bill, brought in by Mr. W. Corbet, stands over until Wednesday, November 14, when the Committee stage is to be taken.

THE second reading of the Pharmacy Acts Amendment (Lords) Bill, which is in charge of Sir Henry Roscoe, is appointed for Monday, November 12.

COLLAPSE OF THE MILAN INTERNATIONAL PHARMACEUTICAL CONGRESS.—In spite of all assurances, and more or less official announcements to the contrary, it is now certain that no International Pharmaceutical Congress will be held this year. The August number of the *Bollettino Farmaceutico* announces that at a meeting of the Milan pharmacists (apparently the only one ever held in connection with the scheme) it was decided to postpone the congress until next year, owing to the present "exceptionally unfavourable conditions of pharmacy" in that ancient city. But it is doubtful whether the Milan people are at all anxious for the congress to meet within their walls, for in 1889, which year they have now chosen, the general meeting of the Italian Pharmaceutical Society has already been arranged to take place in Rome, while the second Italian pharmaceutical congress will also be held next summer in the same city.



## Metropolitan Reports.

**AN ATHLETIC DRUGGIST'S SUNDRIESMAN.**—At an athletic competition in July, at the People's Palace, Charles Pugh, an employé of Messrs. Lynch & Co., Aldersgate Street, was placed first for the horizontal bar competition, first for the parallel bars, first for the vaulting horse, and first all round. The prizes were distributed last week by the Duchess of Albany, and consisted of silver medals recording the events.

**THE WALTHAMSTOW CASE.**—William Barber, the chemist's assistant in custody on suspicion, was again examined on Saturday last in reference to the death of Mrs. Annie Mary French under circumstances already stated. Further evidence was given by Mr. French, who said that he and his wife and Barber were very intimate. Barber had applied chloroform to his wife's face for toothache in his (French's) house. He had often received notes from the prisoner. Dr. Thorpe repeated the evidence which he gave at the inquest, and said that chloroform was sometimes used for toothache, applied to the gums. Carbolic acid was also sometimes used for toothache, but muriate of morphia was seldom used. By Mr. Bore (for defendant): The smell of chlorodyne would somewhat resemble that of chloroform. Dr. Blight gave corroborative evidence, adding, in reply to the Bench, that in his opinion chloroform must have been inhaled. There was a distinct smell of chloroform from several portions of the body. By Mr. Lewis (for the prosecution): There was no smell of muriate of morphia. By Mr. Bore: There were no traces of deceased having been outraged. Dr. Thorpe, re-called, said that he saw no signs in the mouth of the deceased of the use of carbolic acid. Mr. H. S. Haynes (the clerk) then read over the depositions of the various witnesses, and, when Dr. Thorpe's were concluded, the chairman said he observed that Dr. Blight was not called in for three hours; he would like to know whether Dr. Thorpe did not think the case of sufficient importance at first to send for assistance. Dr. Thorpe: No, sir; I did not think it was necessary. The prisoner was then remanded for a week.

**THE LEWISHAM POISONING CASE.**—At the Middlesex Sheriff's Court, before Mr. Under-Sheriff Burchell and a jury, an action was heard on August 9, in which Mrs. Catherine Ann Brewster sought to recover damages for the loss of her husband from Mr. Edward Lawrence Henry. Mr. G. A. Vennell, barrister, represented the plaintiff. No counsel was in attendance for the defendant. The defendant is a chemist, carrying on business at Loampit Vale, Hither Green Lane, also in Lewisham. Plaintiff is the widow of a publican, who was the proprietor of the Sir Daniel Brewster public-house at Lewisham, and also carried on business as a builder. On June 17 last a medical student named Malcolm Cowan, and a friend of Mr. Brewster's, called at his house. Mr. Brewster complained of headache, and Cowan suggested that he should take five drops of strychnine in a seidlitz powder, remarking that he often took it himself. Deceased asked Cowan to get it for him. Cowan went to Henry's shop, where he asked for five drops of strychnine, to be mixed with half a seidlitz powder. He was served by a young man named Eugene Henry, aged 22, the son of the defendant, but, instead of supplying five drops of strychnine, the assistant put in eight grains, which counsel said was sufficient to kill twenty persons. The bottle into which the strychnine was put was not labelled "Poison," but simply "The draught," nor was there any statutory entry in the chemist's book of the sale of the poison. It was further alleged that the assistant made no inquiries as to what the poison was for. Mr. Brewster, who was a strong, hale, and hearty man of about 70 years of age, took the draught next morning, and in six minutes he was dead. At an inquest subsequently held the medical student and the chemist were severely censured, as was also the son. The widow now brought an action, under Lord Campbell's Act, to recover damages. Counsel said the act was one of very gross negligence, and complained strongly that the defendant had put in no appearance, which was really treating the case with utter contempt. After hearing evidence, the Under-Sheriff, in summing up, said it would have been more satisfactory had the defendant come before them, but he thought, perhaps, if the jury gave a verdict for a moderate amount it would be

more advantageous for the plaintiff, as she would perhaps be more likely to get the money. The jury awarded the plaintiff 200*l*.

As another result of the same case Eugene Henry, chemist's assistant, of 128 Hither Green Lane, Lewisham, was summoned by Superintendent Butt, of the P division of police, at Greenwich Police Court on Tuesday, "for unlawfully selling a certain poison—to wit, strychnine—to one Malcolm Cowan in a vessel, such vessel not being distinctly labelled with the name and address of the seller of the poison, and omitting to cause any entry to be made of the sale in a book kept for the purpose, contrary to the statute." The evidence having been given, Mr. Fenwick told the defendant that it was a serious case, and fined him 5*l*. and 12*s*. costs.

[The legality of this conviction is doubtful. It is clear from the charge as reported that Henry was summoned under the 17th section of the Pharmacy Act, which expressly provides that "for the purposes of this section the name and address of the seller of the poison, and omitting or servant shall be deemed to be the seller." The seller under this section would, therefore, be Henry's employer, that is, in this case, his father.]

## Provincial Reports.

*Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.*

### BIRMINGHAM.

**CRICKET.**—The match between the married and single members of the Midland Counties Chemists' Association, which we announced last week, was played on Wednesday at Cannon Hill Park in beautiful weather. There was a good sprinkling of pharmaceutical spectators, and a fair show of ladies. The married men made a good fight, but they were overpowered by their less responsible antagonists. Mr. Thompson captained the married team, and Mr. Alcock led the single men. The scores were as under:—

Married.			Single.		
Crutchlow, b Alcock	..	8	Boucher, b Crutchlow	..	2
Prosser, b Boucher	..	5	Whitby, b Cripps	..	10
Drew, not out	..	22	Chapman, b Crutchlow	..	28
Cripps, b Alcock	..	11	Alcock, st Drew, b Cripps	..	18
Thompson, b Boucher	..	1	Winfield, b Crutchlow	..	0
Selleck, c Asten, b Alcock	..	2	Nicholson, b Crutchlow	..	2
Wakefield, b Alcock	..	4	Spurway, b Crutchlow	..	18
W. Jones, b Alcock	..	0	Asten, b Drew	..	2
W. Southall, b Boucher	..	3	Paul, b Crutchlow	..	6
Morley, b Boucher	..	0	Hollick, c Barlow, b Crutchlow	..	2
F. Barlow, h w, b Alcock	..	3	Rotherham, not out	..	0
Extras	..	7	Extras	..	9
Total	..	66	Total	..	97

### BLACKPOOL.

**A CURIOUS EFFECT OF CHLORODYNE.**—On August 9, at the Blackpool Police Court, a woman named Hepworth was sent to prison for a month for the theft of various articles of wearing-apparel. The chief constable said the prisoner had evidently given way to the habit of taking chlorodyne, and was suffering from the effects of it. Seventeen empty bottles had been found in her possession.

### DRIFFIELD.

**THE MODERN METHOD.**—Mr. Lewis B. Ross, "pharmaceutical chemist with honours," seems to have little hope of winning the favour of his neighbours by his diploma alone. On a handbill Mr. Ross describes himself as "chemist, greener, and provision merchant," and he declares at the head of it, "No one shall beat me for price and quality." A few specimens from his list will suffice to show that the man who tries to beat him will have to "sit up":—Citrate of magnesia, 1*s*. per lb., 28 lbs. 10*d*. per lb., 1*s*. bottles 4½*d*. each, cwt. 8½*d*. ton 7½*d*. Ross's Excelsior baking powder, 6*d*. per lb., 6*s*. per stone. Pure boiled sweets, 2½*d*. per lb., 2*s*. 9*d*. per



tone. "The County Tea, the finest blend in Driffield," s. 6d. per lb.; other teas, 1s. 2d., 1s. 8d., and 2s., black or mixed. Pure malt vinegar, 9d. per gallon. Homœopathic 300a, 7½d. per lb. Lemon kali, 8d. per lb., 8s. per stone. Pure jam, all kinds. Carbonate of soda, 1s. per stone, s. 6d. per cwt. Cream of tartar, 1s. 5d. per lb. Tartaric acid, 1s. 10d. per lb. Clothes-pegs, knife-boards, clothes-lines, ham, and bacon are among the luxuries which Mr. Moss deals in.

#### HANLEY.

**BILL-POSTING.**—At the Borough Police Court last week Robert Shufflebotham, labourer, and Frederick Parry, of Mayer Street, were charged with a breach of the by-laws of the borough by posting bills without the consent of the owner of the premises. Mr. Ashmall appeared for the defence. Inspector Vickers gave evidence of having seen Shufflebotham post a bill on the wall of a house at the junction of Bath Street and Market Street. He took him to the owner and occupier of the premises, Mr. George Ridgway, cabinet-maker, who said he had not given consent to the posting of the bill on the wall. The bill denounced "Quacks and Hackery," and advertised Parry as "a duly-qualified M.R.C.D." Shufflebotham was posting Parry's bills over those of a person who described himself as "Professor Stewart." Parry, on being spoken to, said, "Oh, I have had a case of that kind before, and it has been dismissed, and I'll bet you 10 pots this is." The magistrates' clerk (Mr. Hamshaw) observed that Parry had committed an offence by attaching the letters M.R.C.D. to his name, the obvious intention being to mislead people into the belief that he was an M.R.C.S. Parry said he was a member of a society of registered druggists. Mr. Jones: There is no such society; it is a palpable imposition. Mr. Ashmall explained that Parry was registered as a chemist under the Pharmacy Act, 1863. [The name of Frederick Parry does not appear on the present register of chemists and druggists, nor is there any registered chemist in the list of the name of Parry given as residing at Hanley.] A long legal argument took place between Mr. Ashmall and the clerk to the magistrates, the outcome of which was that the charge against Parry was withdrawn. Shufflebotham, however, was fined 5d., including costs. The chairman, in making this decision of the bench known, said his brother magistrates would be very glad indeed if they could put a stop to this particular practice of posting objectionable bills. The men who did the work performed their task at the dead of night; and no one seemed able to detect them at it. He must compliment the inspector that he had been enabled to bring one man to justice. The Bench were very sorry they could not convict Parry, for they looked upon him as the real culprit. He did not know how they could reach him in any other way, but it was to be hoped they would ultimately. The Court inquired of Parry whether he would not pay the fine for Shufflebotham; and, upon receiving an answer in the negative, Parry was advised to reconsider his determination. Eventually Parry undertook to pay Shufflebotham's fine in a month.

#### LEICESTER.

**BOILED OR RAW.**—At the Leicester County Court last week George Lenton, a cowkeeper, sued John George Kelly, chemist and druggist, Charnwood Street, for 20d. for the loss of a cow. The case was tried by a jury. Mr. A. T. Toller appeared for the plaintiff, and Mr. Simpson for defendant. Mr. Toller said the circumstances were rather peculiar. In April last Lenton sent his daughter, a child aged 12, to defendant's shop for a pint of linseed oil, giving her a slip of paper with the order written upon it. The shop was in charge of two young men, one of whom served her and charged 5d. Plaintiff wanted the oil for a cow, but ten hours after he had administered it the cow died, and there was no doubt at all that it was in consequence of having had boiled linseed oil instead of what was ordered. There was negligence on the part of Kelly's servants, and the bottle bearing no label, there was nothing to guide plaintiff in any way. The defence was that the girl did not say what the oil was wanted for, and that when the question was put to her, "Boiled or raw?" she replied, "Boiled." If that was proved, Mr. Simpson said that defendant could not possibly be held liable.

William Orton, the boy who sold the oil, said when the girl came in she asked for a pint of linseed oil. Witness knew there were two kinds, and in answer to his question the girl said she required boiled. The jury gave a verdict for plaintiff for 6l. 10s., with costs on that amount, and fees for counsel and scientific witnesses, payable 2d. a month.

#### LIVERPOOL.

**DEATH FROM DRINKING CARBOLIC ACID.**—A boiler-maker, named George Hunter, was taken to the Northern Hospital, Liverpool, on Tuesday morning, suffering from carbolic acid poisoning. He had got up early in search of a drink, and had swallowed the acid in mistake. Every attention was paid to the man, but notwithstanding he died in great agony an hour and a half after his admission to the institution. This is the second fatal case of the kind in a week.

**CRICKET.**—**EVANS, SONS & CO. v. AIGBURTH.**—A match was played at Aigburth on Saturday, August 11, on the ground of the latter (a club containing several retail chemists of the town). The score was as follows:—

<i>Aigburth.</i>		<i>Evans, Sons &amp; Co.</i>	
J. Wool, b F. L. Beckett	0	G. Brinson, b Wool	7
Slack, c Manley, b Beckett	3	F. W. Dyke, b Wool	1
E. Duff, c Young, b W. Evans	9	F. L. Beckett, c Duff, b Sales	13
P. Chambers, b Beckett	0	W. Evans, c Doyle, b Wool	2
J. R. Day, b W. Evans	0	R. W. Manley, b Wool	2
T. Sales, b W. Evans	5	R. G. Owen, b Sales	0
Graham, b Beckett	4	J. McMillan, b Sales	3
Doyle, b W. Evans	0	G. Young, b Wool	0
W. Wool, not out	0	E. Lewis, c Chambers, b Wool	1
McCormick, b Beckett	2	C. Jones, not out	1
Brown, b W. Evans	24	J. Blackstock, b Sales	4
Extras	1	Extras	3
Total	48	Total	37

In the second innings six wickets of the Aigburth had fallen for the small total of twelve.

#### MANCHESTER.

**A CHEMIST'S ASSISTANT FOUND DROWNED.**—Mr. J. F. Price, deputy coroner, held an inquest at Pendleton on August 13 on the body of Henry Wild (17), assistant, in the employ of Mr. T. S. Hambleton, chemist and druggist, 135 Ellor Street, Pendleton. On Wednesday morning, as he went to his work late, Wild was told to go home till dinner-time, and he would thereby lose half a day's pay. He left the shop, apparently in a very bad humour, and there was no evidence that he was seen alive after. His dead body was dragged from the Manchester, Bolton, and Bury Canal at Agecroft on Sunday morning. The jury returned an open verdict.

#### STOCKTON-ON-TEES.

**MERCHANDISE MARKS ACT AND AERATED WATERS.**—On August 11, at Castle Eden Police Court, Thomas Spinks, mineral-water manufacturer, Stockton-on-Tees, was charged with using the bottles of another firm of Stockton mineral-water makers, to wit, Messrs. Wright & Hardcastle, thereby making use of prosecutors' trade-mark, in contravention of the Merchandise Marks Act of 1887. Mr. J. Hutton, for the Northumberland and Durham Bottle Association, said that defendant was formerly in the employ of Messrs. Wright & Hardcastle. Latterly he had commenced business on his own account, and had used his former employers' bottle, as stated. Mr. Arthur Hardcastle proved registering the trade-mark on the bottles produced. In reply to Mr. Thomas, who appeared for the defendant, witness said he could not swear that the lemonade in the bottles produced was not his manufacture. The purchase of four dozen bottles of lemonade from the defendant by a Mrs. Graham was proved, and three bottles in the case were Messrs. Wright & Hardcastle's, and the others those of other makers in the district. Mrs. Graham, examined by Mr. Thomas, said she purchased the four dozen as being defendant's own manufacture. Defendant did not attempt to deceive her. Mr. Hutton: But how about Mrs. Graham's customers? Mr. Thomas sub-



mitted that there was not the slightest attempt on the part of the defendant to defraud Mrs. Graham. She perfectly understood that she was buying Spinks's mineral water, which the defendant had not represented as anything else. The defendant being called, stated that most of the bottles he had started business with had been exchanged for those of other makers. Up to a recent period it had been the custom of the trade to use each other's bottles. The Bench said it was an unquestionable offence for one manufacturer to use another's bottles, and fined the defendant 20s. and 3s. costs. There were five other summonses out, in which were involved Messrs. Inman & Co., Leeds; Messrs. Everton and Messrs. Young & Metcalfe, West Hartlepool; Mr. G. Thwaites, Stockton; and Mr. George Anderson, Middlesbrough; but it was agreed to let the present case decide the others.

#### TEWKESBURY.

**COMPETITION.**—One of the three chemists in this quiet town of some 3,000 inhabitants has recently startled his neighbours by the issue of an elaborate price-list of some sixty or seventy pages, with an illuminated cover printed in two or three colours, announcing a great reduction of prices in order to compete with the London stores.

#### WEDNESBURY.

**CARBOLIC ACID IN A GINGER-BEER BOTTLE.**—On Sunday morning Benjamin Langley, a labourer, aged 30, got up about six o'clock and went into the house of a neighbour named Benjamin Jones, whom he asked to give him some "pop beer." Jones, from under the dining table, the usual storage place for the beer, took a champagne bottle containing a beverage which he thought to be "pop." He handed it to Langley, who took a draught and immediately exclaimed, "What have you given me?" and fell down. Jones smelt and discovered it to be carbolic acid. The doctor was summoned, but his services were unavailing. Mrs. Jones, it appears, had obtained the carbolic acid on the previous Friday from the Board of Health offices for the purposes of disinfection and vermin killing. It was supplied her in an unlabelled bottle, and she was unaware that it was poison. Mr. W. H. Coney, nuisance inspector, who was present, stated that it was his invariable custom to inform people to whom he supplied carbolic acid that it was of a poisonous nature. The coroner and several of the jurymen strongly condemned the practice on the part of the authority of allowing carbolic acid to be dispensed without labelling the vessels. A verdict was returned of "Death by misadventure," the coroner being desirous to communicate with the town council, requesting them to immediately take steps to prevent a recurrence of similar mishaps, by having all vessels labelled, supplying it only to persons above the age of sixteen, and having each application for acid entered in a book to be kept for the purpose.

#### WEST BROMWICH.

**CARBOLIC ACID IN A WINE BOTTLE.**—On Tuesday night, Eliza Humphreys, 45, charwoman, of Swan Village, was admitted into the West Bromwich District Hospital suffering from the effects of poison. The woman was employed at the Lower Wrexham Inn, and whilst engaged in one of the offices she took a black wine bottle containing crude carbolic acid from off the mantelpiece and drank a portion of the contents. The assistance of Dr. Brown was procured, and the woman was removed to the hospital, where the stomach-pump was used.

#### IRELAND.

##### DUBLIN.

**WAS IT AN IRON MIXTURE?**—The *Freeman's Journal* says the prescription written by Sir Fielding Auld, M.D., for the Countess of Mornington on the occasion of the birth of her son Arthur, afterwards Duke of Wellington, is still preserved as an interesting record by the Messrs. Evans, the old-established firm of chemists, of Dawson Street, in this city.

#### SCOTLAND.

##### ABERDEEN.

**DEATH RATE.**—The Medical Officer of Health (Professor Matthew Hay) reports that for July the rate was 16.82 per 1,000, and in a note says this is very satisfactory when the unseasonable weather experienced is taken into account. Result to druggists: dull trade.

**DR. GORDON.**—At the close of the summer session of the University the degree of M.D. was conferred on six graduates, Mr. John Gordon, M.B., C.M., formerly a pharmacist, being one of these. Dr. Gordon's thesis was on the Pharmacology of Paraldehyde, and to this highest honours were awarded.

**CAUGHT RED-HANDED.**—While the Turriff Police Court was sitting, on August 9, a message was received to the effect that a case of theft had occurred in the shop of Mr. Fewtrell, chemist. A constable was quickly despatched, and in a few minutes returned with the culprit (John Stuart, a vagrant) and the stolen goods. Stuart pleaded guilty, and was fined 20s., with the alternative of fourteen days' imprisonment.

##### ELGIN.

AN outbreak of pleuro-pneumonia is reported at the farm of Drumbain, tenanted by Baillie Ettles, chemist, Elgin, and the stock, numbering ninety, has been ordered to be slaughtered at the shambles, Rothes, by the local authority.

##### GLASGOW.

**THE MEDICAL ASSOCIATION EXHIBITION.**—The liberality of some of the exhibitors in distributing samples of their specialities to the doctors attending the meeting last week seems to have induced the belief in some minds that the exhibits generally were at the disposal of the visitors. Messrs. Green & Co. reported the loss of two valuable hypodermic cases, and it was said that several copies of Mr. Kingzett's "Nature's Hygiene" vanished from the Sanitas Company's stand.

##### WICK.

**KILLED BY COLOCYNTH PILLS.**—On Sunday last the daughter of a man named Donald Ganson, residing in Pulteneytown, eight years of age, managed to get hold of seven colocynth pills, which she swallowed, no doubt thinking them sweets. The girl died shortly afterwards.

#### NOTE ON COMMON MURIATIC ACID.

By F. H. ALCOCK, Birmingham.

**THAT** sulphuric acid finds its way into the common yellow hydrochloric acid of commerce is very well known, but that it is very variable in quantity and often largely present may not be so generally known.

This common acid is convenient to use in certain laboratory experiments when great purity is not required, in place of the purer and more costly B.P. acid, such as in processes for the production of carbon dioxide, the generation of sulphuretted hydrogen, and preparation of iron and tin solutions.

It was while making a large quantity of  $\text{CO}_2$  from marble that the formation of much insoluble sulphate of calcium, due to the presence of the  $\text{H}_2\text{SO}_4$ , was noticed.

An examination of one sample of muriatic acid showed the presence of 3.34 per cent.  $\text{H}_2\text{SO}_4$  (calculated as such) by weight, and a second sample was found to contain 9.97 per cent. of the  $\text{H}_2\text{SO}_4$  by weight. Knowing that this common acid does very well for making the ferric chloride solution, which is much used here for staining or "browning" gun barrels, different samples of these solutions were examined, and almost all were found to contain the sulphuric radical. Samples of liquor ferri perchloridi were found, with one exception, to contain sulphate in variable quantities. In one specimen which was sent for special examination the amount of  $\text{H}_2\text{SO}_4$  present was 0.23 per cent. This quantity is small. It will, however, indicate the probable source of impurity. The one sample of liq. ferri perchloridi which was free from sulphate made a splendid tincture, and does not deposit at all. Perhaps the freedom from sulphate has something to do with the non deposition of oxy-iron salts.



## FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

THE PROJECT OF A VACCINATION INSTITUTE, to be conducted at the city's expense, has been abandoned by the Paris Municipal Council. The idea was not without some good features, but it was so overloaded with political jobbery at it could not stand adverse criticism, and the scheme has been defeated, as it deserved to be.

SYLPHIUM OPACUM, the new beetroot parasite, will, according to Professor Giard, require no arsenical dosing, as the microscopic enemy of the insect has made its appearance, and bids fair to limit the multiplication of the pest. The parasite's parasite is a fly of the Tachinaria family, which lays its eggs in the body of the sylph larva, where they appear like two or three white specks. The larva suffers no apparent inconvenience from the strange guests, but when it turns into the nymph state the eggs begin to hatch, and the maggots feed on their host. At Fourneux, a place where beetroot is much infested with the parasite, as many as 99 per cent. of the sylph larva were found to bear the eggs in question. Of course they will not be disturbed, as they promise a copious crop of sylphium destroyers, but the pharmacists will miss the expected sale of arsenical compounds.

SENTENCE ON A PHARMACIST'S ASSISTANT.—Last month M. Paton, acting as assistant for M. Vié, a pharmacist on the Avenue du Maine, while resisting the legal inspection, got into difficulty with the police. The occurrence was related in THE CHEMIST AND DRUGGIST of July 14, page 36, and need not be repeated at length. Last week Paton came before the Correctional Tribunal to answer for his misdeeds, the most serious of which was the alleged attempt to stab the police commissaire with a knife. The prisoner's counsel explained the knife away in the most natural manner. Paton was simply using an ordinary spatula, somewhat sharp and pointed, to scrape off labels, when the commissaire ran in from the street, and imagined the prisoner meant to stab him because the spatula had been flourished during the argument. All a mistake, evidently. Yet the court would not accept so clear an explanation, and sentenced Paton to one month's imprisonment.

THE FORTUNES OF A PATENT MEDICINE.—A certain tar preparation was invented some while since by one Boin de Bupré, who named it Elatine, and made arrangements with M. Déclat and the Béral pharmacy for the sale of the stuff. The doctor, for a commission of 15 centimes on each bottle sold, was to recommend the medicine. Pharmacist Lemetta, Béral's successor, was to have a monopoly of the sale, and to make things sure advertised it under the name of Béline-Béral. In 1877 Boin died, and his only child, Mme. R. hefort de Lucy, finding in the defunct's estate nothing of value besides Elatine, which had acquired some notoriety, caused it to be made and sold by another pharmacist, to avoid paying Déclat and Lemetta's percentages. Hence a lawsuit before the Paris Tribunal of Commerce, which decided against Mme. R., enjoining her from causing Elatine to be made, ordering her to pay damages, fine, &c. But the Paris Court of Appeals, before which the case lately came up for revision, completely upset the lower court theories. It held that Elatine-Béral, or Elatine-Déclat, being a secret remedy, not recognised by the Codex, its sale is *ipso facto* unlawful, and consequently all agreements respecting the manufacture and marketing of the article are null and void. Therefore Déclat and Lemetta were declared to have no case for action, and ordered to pay all costs of both suits; the fine was besides remitted, and the lower court's judgment reversed altogether. The foregoing decision agrees with French jurisprudence in regard to patent medicines. The practice of a physician recommending for money some sort of preparation is, besides, repugnant to both opinion and common law, as jurisprudence has proved frequently.

ESTIMATING LITHIA IN MINERAL WATERS.—Professor A. Arnot (the brother of the President) has recommended the following process in a memoir presented by Professor Fritel to the Academy of Sciences. The specimen of mineral water, from 1 to 10 litres, is evaporated, and the alkalino-terrous carbonates, iron oxides, silica, sulphates, magnesia, baryta, and lime, and, lastly, the ammoniacal salts,

are successively precipitated out, care being taken to ascertain by spectroscopical examination that the precipitates retain no lithia. A solution is thus obtained of the alkaline chlorides, with perhaps traces of magnesium chloride. The liquor, having been acidified with a little muriatic acid, is to be evaporated nearly to dryness with constant stirring, and the residue, bruised in a mortar, is macerated with 90 per cent. alcohol. The solution, now containing all the lithia, is to be evaporated again to dryness, and the residue washed, first with strong alcohol, and finally with ethereal alcohol. The washings, on being evaporated to dryness, yield nearly pure lithium chloride. To estimate it, dissolve the crystalline mixture in 15 to 20 c.c. of water; add to the clear portion an equal volume of ammonia and a little fluoride of ammonium. After several hours' rest transfer the whole to a small filter, and wash the precipitate twice with the reagents. The filtrate may be calculated to contain for each 35 c.c. one milligramme of lithium chloride, which should be taken into account. The precipitate is now to be slightly ignited, to drive off the ammonia and ammonium fluoride, and may be weighed as lithium fluoride. The important feature of the process is the following, which will prove the correctness of the operation. The precipitated lithium fluoride is to be heated to dryness with a slight excess of sulphuric acid, to turn it into sulphate, and weighed again. With pure fluoride of lithium the sulphate obtained should weigh a little more than twice as much as the original precipitate. If the result agrees with the theory the operation may be considered accurate. When the sulphate weighs less than the theoretical amount, and it does not take much impurity to vitiate the results, it shows some chloride—most likely magnesium—had been left behind. The magnesium may then be estimated in the sulphate by the ammonium phosphate process, and deducted from the calculated amount of lithia. By the foregoing method Professor Carnot has found in two mineral springs of Burgundy, Maizières, and Santenay, 24 and 31 milligrammes of pure lithia per litre respectively—an exceptional proportion.

## GERMAN PHARMACEUTICAL NEWS.

(From our Berlin Correspondent.)

METHYLENEDOLCARBONIC ACID AND METHYLENEDOLACETIC ACID are the names of two new antiseptics. A paper has been read concerning them by Professor Pencoldt, from which it appears that the first occurs as white acicular needles nearly insoluble in cold water, though the sodium salt is more readily taken up by that menstruum. It was found to be very efficacious in the treatment of wounds, both fresh and ulcerated. Even 45 grains given internally were not observed to exercise any poisonous effect or to produce any unpleasant symptoms. As the preparation of the carbonic acid compound is very difficult and expensive, the methylenedolacetic acid has been made, and while much more cheaply prepared it is equal to the first-named in the treatment of wounds. Further trials are to be made in order to determine if these compounds are preferable in antiseptic surgery to iodoform.

IODOFORM BITUMINATE is the designation of a combination of iodoform and tar which is introduced as being devoid of the objectionable odour of the former substance. Dr. Ehrmann has used it in various cases of soft ulcers with good results. It occurs as a bronze-like powder, which seems to have a conspicuous odour of tar, and at the same time that of iodoform is not unrecognisable. It is difficult to say whether it is likely to have any extended application or not.

THE INTERNATIONAL HORTICULTURAL EXHIBITION in Cologne gives a good idea of the interest taken in the colonies, and also of that which the colonists are beginning to take in themselves and their products. The East African Society shows some beautiful copal and acacia gums, guttapercha, henna, the reddish brown colouring, m'swaki, a root used by the natives for cleaning the teeth, calumba root, sugar-cane, vanilla, tamarinds, &c. From New Guinea and Cameroon various drugs and products have been forwarded, and by the German colonists of Ceylon vanilla, nutmeg, cinnamon, and other flavouring or medicinal agents. From Turkey specimens of opium are shown. The West African Society sends to



Berlin from the German colony of the south-west of the continent referred to gums, ivory, and drugs. These evidences of the awakening interest of colonists in the flora of their adopted country are interesting.

**TREATMENT OF MALARIA.**—The colonies are providing German medical literature with items on the treatment of malaria. A report appears in the *Klin. Wochenschr.* of the experience obtained in Cameroon. The medicinal agents employed were quinine, of which each patient on the average took 170 grains yearly, and cinchona bark in the form of a decoction (1 drachm to 6 ounces) was also resorted to. After the attacks of fever subsided iron was always given, either in the form of Bland's pills or as the powdered sulphate. Eight-grain doses of calomel and opium (as Dover's powder or as tincture) were among the remedies tried, and as narcotics from 30 to 70 grain doses of bromide, and only exceptionally chloral. Subnitrate of bismuth was destitute of beneficial effect. Acetate of lead and ferric chloride were given when blood was passed with the excretions. Antipyrin was useful, and acted efficiently in doses of from 6 to 8 grains in reducing fever.

**THE USE OF CREOSOTE IN PHTHISIS** has suggested various preparations, the latest of which are a syrup of chlorhydric phosphate of lime with creosote and tolu balsam, and an effervescent water containing the compound named. On the latter Dr. Rosenthal publishes a long account in the *Berlin. Klinisch. Wochenschr.* It is contained in glass bottles, each of which holds one decigramme of creosote, 5 grammes of brandy, and 5 ounces of aerated (carbonic acid gas) water. For poor patients he had a water of double the strength prepared. From one to four bottles per day he found very useful.

**WOUND-DRESSING APPLIANCES.**—It has been arranged that in the German Army every soldier shall be provided with a small wound-dressing package. It contains a quantity of oiled cloth, three yards of bandage, two small antiseptic compresses, and a safety pin. The directions are furnished that the wound should be first washed with pure water, with wine, or with brandy, the compress applied, then the oiled cloth, which is to be secured by the safety pin. The whole is then to be covered by the bandage.

**DISPENSING CONVENIENCES.**—Solutions of salts, concentrated infusions, ready mixed powders, &c., for use in dispensing are not allowed to be kept in Germany, and special efforts are made to detect violations of the rule by an examining commission. A few days ago this body of inspectors called upon a pharmacist in this city, who had himself been a very zealous member of a similar commission. During their official search a small closed drawer was found which the pharmacist explained was used for private purposes. The inspectors, however, got scent of some rodent therein, and pointing out that such "private" drawers were irregular and unrecognised adjuncts of the pharmacy, compelled the owner to open it, when lo! a varied stock of such solutions, infusions, &c., with some convenient but unhappily illegal combinations of powders and the like, that were regarded by the horrified inspectors as fertile sources of dispensing mistakes and poisoning cases. The chemist may be punished by having to submit to another search, with its attendant expenses, in three months, instead of the three years as usual.

**THE COMPRESSED CARBONIC ACID GAS INDUSTRY**, in consequence of the running out of the patent rights two years ago, is now worked in ten factories instead of in two as formerly. The Berlin Limited Company, the first of the kind (which has also works on the Rhine), has an annual sale of about 500,000 kilos.; of the compressed gas about 70,000 kilos. are used in Berlin daily. The price, with the increased competition, has fallen from 16m. for an 8-kilo. bottle to 7m., and finally to 5m. A considerable quantity of the substance is used for imparting the necessary effervescent properties to draught beer, &c., and for this purpose a proportion worth (now) about one-eighth of a penny per glass is required.

**MESSRS. BERDOE & Co.**, transfer agents and valuers, of Jewry Street, Aldgate, have taken Mr. W. S. Fish into partnership. Mr. Fish has been connected with the firm for the past thirteen years.

## Foreign and Colonial.

**PHARMACEUTICAL EXAMINATIONS IN HOLLAND.**—The official report of the Commission of Dutch Examiners in Pharmacy for 1887-8, which has been recently published, lays particular stress upon several serious defects in the average acquirements of the candidates. According to the commissioners the candidates are generally very deficient in knowledge of the Latin language, the practical education of assistants in private pharmacies leaves much to be desired, too little time is given to laboratory work, and the study of pharmacognosia, especially from a practical point of view, is much neglected. It will be remembered that in Holland pharmacy is in a fair way of becoming a female occupation *par excellence*. For the chemists' assistants' examinations in July 69 candidates (28 male and 41 female) entered into competition, of which only 28 (7 male and 21 female) were successful.

**A NEW AMERICAN DRUG HOUSE.**—Under the "limited liability" law there has been organised in New Orleans a drug and chemical company, with a capital stock of \$150,000 in shares of \$25 each, and with the object to manufacture pharmaceutical preparations and chemicals, to import drugs and druggists' sundries, and to do a general wholesale drug business. Among the subscribers to the company are found the names of the following local druggists:—Messrs. Alexander K. Finlay, J. B. Lavigne, William Graner, J. N. W. Otto, F. C. Godbold, C. I. Keppler, E. Lalmant, P. L. Cusachs, Eugene May, William Bogel, Eric Brand, E. G. Wunderlich, Alfred Levy, G. Peter, B. Tuma, I. Behrend, W. T. Cluverius, P. H. Jensens, R. N. Girling. Mr. William Bogel has been elected president, Mr. William Graner vice-president, and Mr. John N. W. Otto secretary of the concern, which will commence operations on October 1, and employ several hundred people at the start.

**AMERICAN PHARMACEUTICAL LAW-SUITS.**—A law-suit of the Rumford Chemical Works, an American concern, against three dealers for selling an acid phosphate made by Parke, Davis & Co., of Detroit, Ill., has been decided by the Baltimore Court in favour of the defendants on the ground that descriptive words cannot be patented. According to this finding any American firm can make acid phosphates and sell them as such. Parke, Davis & Co. stepped into the breach and protected their customers, who are now privileged to handle the acid phosphate in question without fear of legal restraints. The case has been lingering on the calendar for two or three years, and there is considerable relief over its termination. Messrs. Parke, Davis & Co. also entered suit some time ago against the firm of Dundas, Dick & Co., for infringing their patent in making empty capsules, and have recently obtained from the New York court a permanent injunction against the latter firm.

**THE TESTING OF OLIVE OIL.**—The following test for the purity of olive oil is given by the chemist of the "Station Agronomique" of Nice:—Ten cubic centimetres of the sample are placed in a vessel with 2 cubic centimetres of nitric acid and 0.10 of powdered albumin. The mixture is then heated to boiling point over a spirit lamp so as to thoroughly mix the various constituents. Pure olive oil retains its yellow, slightly greenish tinged colour; but an admixture of 5 per cent. of seed oil will turn the liquid amber, and the more the olive oil is adulterated the darker does it become, an admixture of 50 per cent. of seed oil rendering it a deep orange. Nitric acid alone has the same effect except in cases of adulteration with poppy oil or oil of arachides (earth nuts). If so-called Lambert nut oil has been used as an adulterant the colour becomes pink with white patches. This nitric acid test causes subsequent precipitation, the precipitate varying, according to the percentage of adulterant used, from yellow to red.

**SOUTH AMERICAN LINSEED.**—The *O. P. & D. Reporter* in a recent issue gives some particulars of the cultivation of linseed in the Argentine Republic. In that country great attention has been bestowed of late years upon this crop as an export article, and the possible abolition of the import duty upon the seed in the United States is expected to open another enormous outlet for the article, which is now nearly all shipped to England. The planting of linseed was com-



nenced in the Argentine Republic ten years ago ; its cultivation is principally confined to the valleys of the River Plate, where fertilisers are unknown and unnecessary and immense herds of cattle are raised on the wild grass alone. In increased acreage has been planted in linseed every year since 1878, and two-thirds of the entire product are shipped abroad. The total exports from the Argentine Republic have increased from 104,279 kilos. in 1878 to 69,426,104 kilos. in 1885, but in 1886 shipments, owing to failure of the crop, again fell to 37,689,967 kilos., of which three-fourths went to England and one-sixth to Belgium. The Argentine linseed is, however, less rich in oil than the Calcutta seed.

**OTTO OF ROSE DISTILLING.**—An Austrian pharmacist who recently spent a holiday by traversing Bulgaria on a bicycle writes to the *Pharmaceutische Post* the following particulars concerning the distillation and adulteration of otto of roses. The distilling apparatus generally used in the country consists of a copper container, and the distillation product is cooled in large wooden vats. One of the largest firms in Kezanlik once tried to introduce modern distilling apparatus such as is employed in large distilleries in Germany and elsewhere, but it was found impracticable in use. Red roses are used almost exclusively for distilling because they yield an oil of sweeter aroma, being richer in the aromatic principle of essential oils. But in order to obtain a more easily solidifiable oil, freezing at 14° C., a certain percentage of white roses is added to the red ones, such a mixture yielding a product richer in stearopten than the other. For adulteration, geranium oil, procured from Constantinople, is most frequently used. The oils are not mixed directly, but the rose-flowers are sprinkled with the geranium oil before distillation, and the adulterant is thus more intimately mixed with the genuine oil than could be the case otherwise. To make this manipulation successful a majority of white flowers must be used. The distillers are exclusively Bulgarians, mostly small men, although they count among their number a few large wholesale dealers, among whom Papazoglou, of Kezanlik, and Strausky and Kobaschiew, of Carlovo, are especially mentioned.

**RUSSIAN TRADE IN DRUGS AND DYESTUFFS.**—The following figures refer to the imports and exports of pharmaceutical articles and drysalteries from and into Russia in the years 1886 and 1887. The weight unit given is the pood (36 1 lbs.), and the value is expressed in roubles:—

## Imports.

	Poods		Roubles	
	1886	1887	1886	1887
Caustic soda and potash ..	860	790	1,880,000	1,892,000
Chemical and pharmaceutical preparations, unenumerated ..	144	126	3,586,000	3,067,000
Hydrochloric acid ..	481	604	1,047,000	1,238,000
Cocconut oil, palm oil, and glycerine ..	174	199	966,000	1,100,000
Dyestuffs ..	3,208	2,887	12,935,000	12,973,000
Glassware ..	—	—	1,716,000	2,387,000
Olive oil ..	683	913	8,040,000	8,976,000
Soda, pearlashes, potashes ..	750	1,140	1,078,000	1,871,000

## Exports.

	Poods		Roubles	
	1886	1887	1886	1887
Hemp seed ..	796	1,070	988,000	1,184,000
Linseed ..	10,209	19,720	14,545,000	26,871,000
Oils (illuminating) ..	9,195	11,823	—	—
Rape seed ..	4,478	6,531	3,479,000	6,617,000
Crude petroleum ..	1,257	1,078	—	—
Oils (lubricating) ..	2,229	2,801	—	—
Alcohol ..	616,125	650,650	8,985,000	8,775,000

**PHARMACY IN BULGARIA.**—The principal pharmacies of Bulgaria, such as those of N. Stransky, in Sophia, and Seltzer, in Plevna, are owned or managed by foreigners (Austrians), but in the more obscure country places the pharmacists are mostly of Bulgarian nationality. But the Bulgarian Government endeavour by all means in their power to close the craft to foreigners, and an enactment was recently made compelling every pharmacist in the Principality to keep

at least two Bulgarian apprentices, and to dismiss all foreign apprentices already employed within six months. But as not enough Bulgarians were found willing to embrace pharmacy as a profession, this law had to be modified to some extent, "one" being substituted for "two" in the compulsory clause respecting native apprentices, and all foreigners already engaged when the enactment was made being allowed to keep their places. The Bulgarian pharmacists, though nominally the law gives them a monopoly in the retailing of drugs, medicines, &c., in reality have a hard task to compete with the so-called "achtars," or dealers in colonial products, who, previous to the emancipation of the Principality, possessed all the trade in pharmaceutical articles, and who, although now by law prohibited from doing so, still sell large quantities of these goods in a more or less surreptitious manner. For English pharmacists Bulgaria scarcely offers any opening. Salaries are microscopic (from 4*l.* to 8*l.* per annum out of doors for "Magister der Pharmacie," (fully qualified pharmacists), although living, in the provincial towns at any rate, is very cheap. A thorough knowledge of the Slav language is absolutely necessary to the dispenser, while in Sofia and the cities on the Danube, German, French, and Roumanian are also required. The Russian Pharmacopœia is used in Bulgaria, and the dispenser must be intimately versed with its requirements, and also with those of the French Codex. English and Italian prescriptions are also frequently met with, the Bulgarian doctors belonging to almost every European nationality. The Bulgarian pharmacies are under the control of the Landes-Sanitäts-Rath (National Board of Health), consisting of a principal physician, three practising physicians, a veterinary surgeon, the official chemist, and a secretary. This body has the right to grant concessions on the German system. All pharmacies are subject to inspection by the Board of Health, and a maximum tax which may be charged for prescriptions is fixed by law. There exists no professional organisation among the Bulgarian pharmacists, nor have they a journal to represent their interests, although two medical journals are already published in the country, one at Varna and one in Sofia.

**NEW PHARMACEUTICAL REGULATIONS IN RUSSIA.**—A commission was appointed some time ago by the Medical Department of the Russian Ministry of the Interior with the object of revising the regulations affecting the pharmaceutical profession. The commission terminated its investigations a few weeks ago, and has now submitted a report recommending important changes in the pharmaceutical laws. The classifications of pharmacists into "Provisors" and "Magisters of Pharmacy" is to be continued, and a four-years course of study at a university will be required from candidates for the latter, or higher, grade. "Magisters of Pharmacy" will take equal rank with doctors of medicine both in civil and in military practice. Only qualified pharmacists will be permitted to open or conduct chemists' shops, nor will an Apotheker be allowed to sell or let his business to an unqualified person. In case of the death of an acting Apotheker, his heirs, if unqualified, must sell the business within twelve months to a qualified person. Pharmacies, being regarded as sanitary establishments, will be exempted from all public dues and taxes. The granting of concessions for pharmacies will be delegated to the local authorities, who will determine, once every ten years, the number of pharmacies required in their district. The taxing of prescriptions (viz., the fixing of a maximum rate which the Apotheker is allowed to charge for drugs), is left to the Medical Department of the Ministry of the Interior.

An entirely new departure is to be made as regards the admittance of women into the pharmaceutical profession, the Russian Government having decided to allow "persons of the female sex" to enter the craft as "apprentices," conditional upon a certificate that the candidate has passed through the four lower classes of a gymnasium. After having passed their usual apprenticeship, female candidates will be allowed to enter for the Assistants' and "Provisor" examinations either before the usual medical examiners or at the Military Medical Academy, at their own option. But they are not allowed to receive pharmaceutical instruction at a public establishment; the necessary knowledge must be acquired by private study only. Pharmacists who engage female apprentices or assistants are not permitted to keep male assistants.



## Legal Reports.

### THE APOLLINARIS COMPANY v. CLOOTS.

In the Chancery Division of the High Court of Justice on August 10, before Mr. Justice North, application was made on behalf of the plaintiff company for an injunction to restrain the defendant from selling mineral waters other than that of the plaintiffs' as "Apollinaris." The defendant keeps a restaurant in Victoria Street, Westminster, and it was alleged that he sold "Brunnen" water to his customers when "Apollinaris" was asked for. The defendant denied the allegation, stating that if on any occasion a mistake had been made it was owing to the hurry of business. At the suggestion of his lordship the defendant undertook not to sell, or allow to be sold or supplied, any other than the Apollinaris Company's water when "Apollinaris" was asked for.

### THE DENTISTS ACT.

On August 10, Mr. Henry Francis Partridge, of 76 Starnale Road, Shepherd's Bush, appeared to summonses before Mr. D'Eyncourt, charging him with using at his business address, 43 Sussex Place, Old Brompton Road, the name and title of dentist, and the letters L.D.S. (Licentiate of Dental Surgery), thereby implying that he was registered under the Dentists Act of 1878. Mr. Partridge is the proprietor and originator of the South Kensington Ladies' Dental Association, and held a diploma from the Royal College of Surgeons, Ireland, as Licentiate of Dental Surgery. He took to advertising, and the College of Surgeons, considering this unprofessional, cancelled his diploma, with the result that the General Medical Council of England withdrew his name from the Medical Register. Mr. Partridge applied for and obtained a *mandamus* against the Medical Council to compel them to restore his name to the Register, and this was decided in his favour. The Council appealed, but the decision of Mr. Justice Mathew was upheld. In giving judgment in the appeal case Lord Esher said that, although he had decided in favour of Mr. Partridge, the medical authorities could deal with him for "disgraceful" conduct, the word "disgraceful" being of course understood in the sense of "unprofessional" dealings. The suggestion made was acted upon. Notices in regular form were given to Mr. Partridge, and last year he was removed from the Register. Since that time he has made no alteration in his style of qualification and address. Mr. Elliott, on behalf of Mr. Partridge, said that there had only been a technical infringement of the Act, because the action of the Medical Association did not affect the defendant's capacity as a dentist. His skill remained with him, although his diploma had been taken away. Mr. D'Eyncourt fined Mr. Partridge 5*l.* and three guineas costs.

At Worship Street, on Tuesday, Dr. Huntley and Dr. Coe, summoned as of the American Dental Institute, 44 Finsbury Square, appeared to answer a charge of having, on July 27, taken and used the letters D.D.S., or some other name, title, or description, implying that they were registered under the Dentists Act, 1878, as specially qualified to practise dentistry, whereas they were not registered under the said Act. Mr. Melsheimer, barrister, supported the summonses (which by arrangement were taken together), and Mr. Waddy, Q.C., defended. Mr. Melsheimer said that the prosecution was taken under Act 41 and 42 Victoria, and the prosecutors were the British Dental Association. The words of the Act, cap. 33, sec. 3, were followed in the summons, and the Amending Act added that no person should use any words of letters implying special qualification to practise dentistry without being registered. The American Dental Institute, counsel added, advertised as of St. James's Square, Finsbury Square, and Thuroloke Square. The principal was a Dr. Clifford, who was registered. In the pamphlet issued by the institute the names of Dr. Huntley and Dr. Coe appeared, followed by the letters D.D.S. (Pennsylvania University), and D.D.S. (Boston University), respectively; but neither of those qualifications was recognised by the General Council of the British Dental Association, which only recognised under the Act the degrees conferred by Harvard and Michigan Universities (U.S.A.). He (Mr. Melsheimer) would show that the D.D.S. following the names of the defendants was

intended to represent that they were registered and specially qualified. Mr. Thomas Smith, clerk to the solicitors to the British Dental Association, narrated a visit he had paid to the American Dental Institute, 44 Finsbury Square, where he saw Dr. Huntley, and asked him what the letters D.D.S. meant. The defendant replied, "They mean Doctor of Dental Surgery." Witness asked whether the pamphlet was issued with his (Huntley's) authority, and the defendant then wished to know why the questions were put, and witness told him that he was clerk to the solicitors of the British Dental Association, and the object of his visit. Mr. Huntley then said that his name was published with the letters with his consent. In a conversation that followed, the defendant said that the principal of the institute was Dr. Clifford, who was registered, but that he (Huntley) knew that nearly all the others were not. He added that the British Dental Association could not touch them, as they worked for Dr. Clifford. Witness afterwards saw the defendant Coe, whom he asked similar questions, and Mr. Coe said that the D.D.S. meant Doctor of Dental Surgery, and that the pamphlet with his name was issued with his consent. Mr. Waddy, for the defence, admitted that the defendants were not registered, but said they could not be, although duly qualified. He thought the Act a most mischievous one, and that the exclusion of such colleges as those from which the defendants received their diplomas was never intended to have the effect of preventing their practising as qualified persons in this country. If the British Medical Council would recognise that fact there would be more sense than in their playing the part of the three tailors of Tooley Street. Mr. Waddy then proceeded to argue that the defendants had not offended against the legal intention of the Act by announcing themselves as D.D.S.'s, because that was not a recognised special qualification, and he said it would be as stupid to take it as meaning that as it would be to assume that a gentleman entitled to put D.D. after his name thereby announced himself as a capable theologian, or that one writing M.A. (often a purely honorary degree) after his name was capable of editing a Greek play. Mr. Bushby reserved his decision.

### HERBALIN.

On August 9, in the Chancery Division of the High Court of Justice, an application was made on behalf of the defendants in the case of Humphries v. The Taylor Drug Company for further and better particulars. Mr. Justice Kekewich was the judge. Mr. J. Cutler appeared for the defendants, and Mr. G. J. Wood for the plaintiff. Mr. Cutler said the action was brought by the plaintiff, who carried on business at Bradford, and who had registered as his trade-mark for a drink prepared by him a certain device, to which he had added the word "Herbalin," and he complained that the defendants were infringing such trade-mark by using the word "Herbalin" on bottles containing a similar preparation manufactured and sold by them. The defendants alleged that they had been in the habit of using the word "Herbalin" before the plaintiff had registered his trade-mark. The plaintiff said the use of the word "Herbalin" by the defendants "had induced divers persons to purchase goods as and for the plaintiff's which were not of his manufacture." The defendants submitted that they were entitled to know who were these "divers persons." Mr. Wood opposed the application, and contended that the disclosure they asked was not necessary for their defence. If the allegation in the statement of claim had been that they were inducing "customers" of the plaintiff's to buy their goods, then he admitted they would be entitled to the names of the "customers" so induced, but there was no allegation here that any person who had been induced to buy the defendant's goods filled any particular relationship towards either the plaintiff or the defendants. His Lordship, in giving judgment, said he could not see that any hardship would be occasioned to the plaintiff by his being ordered to give up the names and addresses of the divers persons who, it was alleged in the statement of claim, had been induced to purchase the defendants' goods as and for the plaintiff's, and he therefore directed that the information asked for should be given. Mr. Wood asked for a fortnight's time to comply with the order, and said that the matter was so important to his client that it might be desirable to take the matter further. Mr. J. Cutler did not object to a fortnight's time



being given if it was intended to appeal. His Lordship: very well, then; if the plaintiff appeals within a fortnight there will be the usual stay; if not, he must give the particulars desired.

## EXTRACT OF HERBS.

IN the High Court of Justice, Chancery Division, before Mr. Justice Kay, on August 3, Messrs. Newball & Mason, of Nottingham, manufacturing chemists, applied for an injunction against the Supply Stores Association (Limited), Dudley. The plaintiffs alleged that the defendants had infringed their trade-mark for "Extract or Essence of Herbs," and had sold, offered for sale, some extract or essence of herbs not made by them, but put into bottles and wrappers and generally made up and prepared for sale in such a style as to imitate their preparation. Mr. E. Swinfen Eady appeared for the plaintiffs, and Mr. Sebastian for the defendants.

His lordship made an order perpetually restraining the defendant from infringing Messrs. Newball & Mason's trade-mark, and from selling, or offering for sale, any essence or extract of herbs not made by Messrs. Newball & Mason, put into bottles and wrappers and generally made up and prepared for sale in such a way as to represent or lead to the belief that it was Messrs. Newball & Mason's preparation. The defendants were also ordered to pay to Messrs. Newball & Mason damages for the infringement and sale of the preparation in imitation of theirs, the damages to be ascertained by an inquiry to be held. Defendants also to pay costs of the action.

## FAILURES AND BANKRUPTCY REPORTS.

*Re J. CARISFORD NISH*, 113 Stockton Street, Moss Side, Manchester, Commission Agent, Drysalter, and Aniline Dye Merchant.

A RECEIVING order was made against this estate on July 24 last. The summary of the debtor's statement of Affairs issued by the Official Receiver shows gross liabilities amounting to 1,390*l.* 16*s.* 1*d.*, of which 1,118*l.* 12*s.* 1*d.* is expected to rank against the estate for dividend; and assets estimated to produce 225*l.* 13*s.* The principal creditors are:—

	£	s.	d.
Read, Holliday & Sons, aniline dye manufacturers, Huddersfield .. .. .	251	5	8
Bryce & Rumpff, aniline dye merchants, 20 Booth Street, Manchester .. .. .	251	2	6
Schad, Julius, drysalter, 14 Charlotte Street, Manchester .. .. .	157	1	9
J. S. Hyman de Tiel, merchant, 81 Fountain Street, Manchester .. .. .	143	1	8
Dawson, John, aniline dye manufacturer, Kirkheaton, near Huddersfield .. .. .	104	11	3
Thomas & Dower (Limited), aniline dye manufacturers, Garratt Lane, Tooting, Surrey .. .. .	63	10	11
Petersen, Ferdinand, aniline dye manufacturer, Schweizerhalle, near Basle, Switzerland .. .. .	45	12	2
Blythe, W. & Co., chemical manufacturers, 65 Mosley Street, Manchester .. .. .	40	14	4
Thompson, W. G., & Co., aniline dye manufacturers, 5 Cooper Street, Manchester .. .. .	28	16	3
Lomax, Jas., & Co., drysalters, 75A Cannon Street, Manchester .. .. .	14	11	6
Manchester Aniline Company, 55 High Street, Manchester .. .. .	12	9	5

In the Official Receiver's observations it is stated that the receiving order was made on the debtor's own petition on July 24, and that on the same day he was adjudged bankrupt. Up to September, 1887, he was a commission agent carrying on business at 12A New Cannon Street, Manchester. In that month he first commenced business on his own account, at the same premises, as a drysalter and aniline dye merchant. He also continued his agency business. He had 5*l.* of capital when he commenced business and his office furniture and fixtures, which had all been paid for. He alleges that he only became aware of his insolvency at the beginning of last month, and that he has not contracted any debts with a knowledge of his insolvency. He sets down the

net loss arising from carrying on business as a drysalter and aniline dye merchant at 721*l.* 5*s.* 3*d.*, and he shows bad debts amounting to 108*l.* 9*s.* 3*d.* He attributes his failure to bad trade, heavy expenses, and keen competition. The first meeting of creditors was held on August 10, the Official Receiver (Mr. C. J. Dibb) presiding. Mr. James Fowler Kellas-Johnstone, 69 Princess Street, Manchester, was appointed trustee.

The public examination of the debtor took place at the Manchester County Court on August 15, before Mr. Registrar Lister. The debtor confirmed the statements made in the "observations" of the Official Receiver. The examination was adjourned.

*Re J. DARDS*, Old Kent Road and London Road, S.E., Mineral-water Manufacturer.

MR. POPE, an acting Assistant Receiver, presided on Wednesday, at the London Bankruptcy Buildings, at the first meeting of creditors under this failure. The receiving order was made on the debtor's own petition on July 3 last, and the accounts show liabilities 2,650*l.* 11*s.* 8*d.*, and assets 392*l.* 5*s.* 8*d.*, and stated to consist of cash, 1*l.*; stock-in-trade, valued at 7*l.* 10*s.*; plant, machinery, tools, trade fixtures, fittings, utensils, &c., estimated to produce 380*l.*; good book debts, 2*l.* 15*s.* 10*d.*; and surplus from security, 19*s.* 10*d.* The debtor formerly carried on business as a lighterman, and subsequently leased and sublet properties in the City until January, 1886, when he was adjudged bankrupt. No dividend under these proceedings was paid, and he obtained his discharge in August, 1886. He commenced his present business in July, 1887, with money advanced by his wife. She now claims for 1,750*l.*, money lent; but this cannot rank for dividend in competition with the other creditors. On the application of Mr. Feather, representing creditors to the amount of 220*l.*, Mr. E. M. Mullins, 128 Newington Causeway, was appointed trustee, with Messrs. F. Oakley, M. H. Glover, and J. Jarrett as a committee of inspection.

*Re J. H. ATHERTON*, Wigan, Chemist and Druggist.

THE public examination of this debtor was opened on August 14 at the Wigan County Court, before Mr. Penny, Deputy Registrar. Mr. W. S. France, jun., represented the bankrupt, and there were about a dozen creditors present. In answer to Mr. Winder, the Official Receiver, the debtor said he commenced business as a chemist and druggist in Standishgate, Wigan, about six years ago on his own account. About February, 1884, he entered into partnership with Mr. William McConnell, but the latter did not bring anything as a set off to the capital and business he had already made. McConnell was to have an equal share of the profits. He (McConnell) borrowed 400*l.* from his father at the time, but it was not agreed that that sum should be set off against his (the bankrupt's) interest in the business. The 400*l.* was laid out in business, another shop being opened in Ormskirk Road, Pemberton, which was in the hands of a manager. He and McConnell attended to the shop in Standishgate, and they went on as partners for four years. They did not take stock at every year's end. They each took out of the business 1*l.* per week, but did not make any calculation whether the business was making 2*l.* a week after the rent, taxes, and other expenses had been met. They occasionally added up their liabilities. He (the bankrupt) had nothing to do with the keeping of the accounts—his partner did that. In February this year they came to the conclusion they had better dissolve partnership, but at that time he did not know what was owing. He knew that most of the creditors of the estate now were creditors during the partnership. When the partnership was dissolved, he agreed to give McConnell a promissory note for twelve months for the money he had borrowed from his father. He entered into no agreement to pay the liabilities of the firm. The payment cash-book had not been added up since May, 1885, because he never had anything to do with the keeping of the books. He had used a receipt-book since McConnell left him. On July 14, 1887, they were insolvent to the extent of 607*l.* 19*s.* 6*d.*, and if he had not since received 220*l.* from his father and wife his deficiency would now have been 827*l.* 19*s.* 6*d.* The Official Receiver said, as a trustee had been appointed, and he had not had time to go into the



matter, he would like an adjournment so that he (the trustee) could put questions himself. The examination was adjourned till October 2.

EDWARD JONES, 6 New Street, Kennington Park, Chemist.

Mr. C. J. Stewart, an Assistant Official Receiver, presided on Tuesday last at the first meeting of creditors under this failure. The receiving order was made on July 18 last on the petition of Dr. Parrott, 1 Brunswick Terrace, Camberwell, and the debtor has filed accounts showing liabilities of 204*l.* 14*s.* 10*d.*, and assets 5*l.*, being the value set upon the stock-in-trade. The debtor, who is described as a pharmaceutical chemist, states that until Midsummer last he traded at 59 Camberwell Road. He then sold the business to Mr. George Bell, and has managed it for him under an agreement to pay him one guinea a week and retain the profits; but he further states he has made no payment in this respect. The debtor attended the meeting, and stated he had no offer to make to the meeting. He had in 1881 liquidated by arrangement at Leicester, and could not say whether he had received his discharge from those proceedings. A dividend of 3*s.* 6*d.* in the pound was then paid to his creditors. He received 36*l.* from Mr. Bell for the business at Midsummer last, and paid the money away to various creditors. The chairman stated that as this was a summary case, the Official Receiver will remain as trustee. The public examination is fixed for September 6. The following are the principal creditors:—

	£	s.	d.
Parrott, Dr., 82 Camberwell Road .. ..	137	7	2
Walker, C. E. Oscar, 6 Sergeant's Inn, E.C. ..	15	15	0

## Gazette.

### PARTNERSHIPS DISSOLVED.

Chadwick & Collins, Wington, Somerset, surgeons and apothecaries.  
Hocle & Nourse, Parkhurst Road, N., general medical practitioners.  
King & Furber, Herne Bay, brewers and mineral water manufacturers.

### THE BANKRUPTCY ACT, 1883.

#### ADJUDICATION.

Jones, Edward, Camberwell New Road and New Street, Kennington, chemist.

#### ORDER ON APPLICATION TO APPROVE SCHEME.

Dixon, Henry Benjamin, Hanley, chemist—composition of 6*s.* 8*d.* in the pound, by three instalments of 2*s.* 3*d.*, 2*s.* 3*d.*, and 2*s.* 2*d.*, at two, four, and six months. Adjudication annulled.

#### ADJUDICATION ANNULLED.

Dixon, Henry Benjamin, Hanley, chemist—approval of a composition of 6*s.* 8*d.*

#### ORDER MADE ON APPLICATION FOR DISCHARGE.

Barnes, William Jacob, Rainham, Essex, chemical manufacturer—discharge suspended for two months.

### EXTRACTS FROM THE REGISTER OF DEEDS OF ARRANGEMENT.

The following deeds of arrangement with creditors have been filed at the Bills of Sale Office, under the provision of the Deeds of Arrangement Act, 1887. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision in the Act, making any of these arrangements binding upon dissenting creditors.

Cooper, Thomas, Etwell, Derby, grocer, draper, and druggist—Trustee, H. A. Sale, 23 Chapel Bar, Nottingham, grocer. Date of deed, August 10; filed, August 11; unsecured liabilities, 189*l.* 7*s.* 1*d.*; estimated net assets, 100*l.*

Fletcher, John, deceased (by executors and beneficiaries under his will), late Pillsworth Road, Hopwood, and the Poplars, Broadfield, Heywood, Lancaster, manufacturing chemist—Trustee, W. Nabb, Bury, C.A. Secured creditors, 450*l.* Date of deed, August 6; filed, August 11; unsecured liabilities, 1,147*l.* 18*s.* 10*d.*; estimated net assets, 1,021*l.* 4*s.*

### EPIDEMIC DISEASE.

AN important memorandum on the proceedings which are advisable in places attacked or threatened with epidemic disease, which has been drawn up by Dr. George Buchanan, F.R.S., has been issued to sanitary authorities by the Local Government Board. In this memorandum it is stated that wherever there is prevalence or threatening of cholera, diphtheria, fever, or any other epidemic disease it is of more than common importance that the statutory powers conferred upon sanitary authorities for the protection of the public health should be well exercised by those authorities, acting with the advice of their medical officers of health.

Proper precautions are equally requisite for all classes of society. But it is chiefly with regard to the poorer population, therefore chiefly in the courts and alleys of towns, and at the labourers' cottages of country districts, that local authorities are called upon to exercise vigilance and to proffer information and advice. Common lodging-houses and houses which are sub-let in several small holdings always require particular attention.

Wherever there is accumulation, stink, or soakage of house refuse or of other decaying animal or vegetable matter the nuisance should as promptly as possible be abated, and precaution should be taken not to let it recur. Especially examination should be made as to the efficient working of sewers and drains, and any defect therein and any nuisance therefrom or from any foul ditches or ponds should be got rid of without delay. The ventilation of sewers, the ventilation and trapping of house drains, and the disconnection of cistern overflows and sink pipes from drains should be carefully seen to. The scavenging of the district and the state of receptacles for excrement and of dustbins will require close attention. In slaughter-houses, and wherever animals are kept, strict cleanliness should be enforced.

In the removal of filth during periods of epidemic disease it is commonly necessary to employ chemical agents for reducing or removing the offence and harm which may be involved in the disturbance of the filth. In the removal of privy contents these agents are more particularly wanted if the disease in question be cholera or enteric fever. The chemical agent should be used liberally over all exposed surfaces from which filth has been removed. Unpaved earth close to dwellings, if it be sodden with slops or filth, ought to be treated in the same way.

Sources of water supply should be well examined. Water from sources which can be in any way tainted by animal or vegetable refuse, especially those into which there may be any leakage or filtration from sewers, drains, cesspools, or foul ditches, ought no longer to be drunk. Above all, where the disease is cholera, diarrhoea, or enteric fever it is essential that no impure water be drunk.

The liability of leaky pipes to act as land drains and to receive foul matters as well as land drainage through their leaks is not to be overlooked. And such leaky pipes, running full of water with considerable velocity, are liable to receive, by lateral insuction at their points of leakage, external matters that may be dangerous. This latter fact is not recognised so generally as it should be, and ignorance of it has probably baffled many inquiries in cases where water services have in truth been the means of spreading disease.

If, unfortunately, the only water which for a time can be got should be open to suspicion of dangerous organic impurity, it ought at least to be boiled before it is used for drinking, but then not to be drunk later than twenty-four hours after it has been boiled. Filtering of the ordinary kind cannot by itself be trusted to purify water. It cannot be too distinctly understood that dangerous qualities of water are not obviated by the addition of wine or spirits. When there appears any probable relation between the distribution of disease and of milk supplies, the cleanliness of dairies, the purity of the water used in them, the health of the persons employed about them, and the health of the cows that furnish milk should always be carefully investigated. Even apart from any apprehension of milk being concerned in a particular outbreak of disease, it is desirable that English people should adopt the custom, which is always followed in some Continental countries, of boiling all milk at once upon its reception into a house.

The washing and lime-whiting of uncleanly premises,



specially of such as are densely occupied, should be pressed with all practicable despatch.

Overcrowding should be prevented. Especially where disease has begun, the sick room should, as far as possible, be free from persons who are not of use to the patient.

Amply ventilation should be enforced. It should be seen that windows are made to open, and that they are sufficiently opened. Especially where any kind of infective fever has begun, it is essential, both for patients and for persons who are about them, that the sickroom and the sick house be constantly traversed by streams of fresh air.

The cleanliest domestic habits should be enjoined. Refuse matters should be speedily removed or destroyed; and things which have to be disinfected or cleansed should always be disinfected or cleansed without delay.

Special precautions of cleanliness and disinfection are necessary with regard to infective matters discharged from the bodies of the sick. Among discharges which it is proper to treat as infective are those which come in cases of small-pox and scarlatina from the affected skin; in cases of cholera and enteric fever from the intestinal canal; in cases of diphtheria and scarlatina from the nose and throat; likewise, in cases of any eruptive or other epidemic fever, the general excretions of the sick. The caution which is necessary with regard to such matters must, of course, extend to whatever is imbued with them; so that bedding, clothing, towels, handkerchiefs, and other articles which have been in use by the sick may not become sources of mischief, either in the house or to which they belong or in houses to which they are conveyed. So far as articles of this class can be replaced by bags or things of small value, it is best to use such things and burn them when they are soiled. Otherwise clothing and infected articles should be subjected to the disinfectant of the sick room or be removed for disinfection by heat.

In enteric fever and cholera the evacuations should be regarded as capable of communicating an infectious quality to any nightsoil with which they are mingled in privies, drains, or cesspools; and after such disinfection of the mass is practicable, they should be disposed of without delay and under the safest conditions that local circumstances permit. They should not be thrown into any fixed privy receptacle, and above all they must never be cast where they can run or leak into sources of drinking water.

All reasonable care should be taken not to allow infective disease to spread by the unnecessary association of sick with healthy persons. This care is requisite, not only with regard to the sick house, but likewise with regard to schools and other establishments wherein members of many different households are accustomed to meet.

If disease begins in houses where the sick person cannot be properly accommodated and tended, medical advice should be taken as to the propriety of removing him to an infirmary or hospital. Every sanitary authority should have in readiness a hospital for the reception of such cases.

Where dangerous conditions of residence cannot be promptly remedied, it will be best that the inmates, while unattacked by disease, remove to some safer lodging.

Privation, as predisposing to disease, may require special measures of relief.

In certain cases special medical arrangements are necessary. For instance, as cases of cholera in this country often begin somewhat gradually in the comparatively tractable form of what is called "premonitory diarrhoea," it is essential that, where cholera has appeared, arrangements should be made for affording medical relief without delay to persons attacked, even slightly, with looseness of bowels. So, again, where smallpox is the prevailing disease, it is essential that all unvaccinated persons (unless they previously have had smallpox) should very promptly be vaccinated; and that revaccination should be performed in cases properly requiring it.

It is always to be desired that the people should, as far as possible, know what real precautions they can take against the disease which threatens them, what vigilance is needful with regard to its early symptoms, and what (if any) special arrangements have been made for giving medical assistance within the district. For the purpose of such information printed handbills or placards may usefully be employed, and in cases where danger is great house-to-house visitation by discreet and competent persons may be of the utmost service, both in quieting unreasonable alarm and in leading or

assisting the less educated and the destitute parts of the population to do what is needful for safety.

The present memorandum relates to occasions of emergency. Therefore the measures suggested in it are essentially of an extemporaneous kind; and permanent provisions for securing the public health have, in express terms, been but little insisted on. It is to be remembered, however, that, in proportion as a district is habitually well cared for by its sanitary authority, the more formidable emergencies of epidemic disease are not likely to arise in it.

## Trade Notes.

PENNY bottles of cherry blossom are now being hawked about the City.

MESSRS. HARDY & Co., chemists, have removed from the corner of Mincing Lane, Fenchurch Street, to the similar corner of Rood Lane, 23 Fenchurch Street.

MESSRS. C. R. HARKER, STAGG & MORGAN have now returned to their old address at 15 Lawrence Pountney Lane. The premises, which were destroyed by fire just a year ago, have been rebuilt and refitted, and in the new warehouse every modern convenience has been adopted to facilitate business.

THE SAN PABLO NITRATE COMPANY (LIMITED).—Capital, 160,000*l.* in 32,000 shares of 5*l.* each. Object, to acquire the San Pablo Nitrate Works and estate of over 1,500 acres of nitrate of soda "caliche" deposit, in the Province of Tarapacá, Chili, and to carry on the business of nitrate of soda and iodine manufacturers and exporters.

THE directors of Brunner, Mond & Co. (Limited), in their report for the half-year ended June 30, announce a profit balance of 99,852*l.*, which, with 34,988*l.* brought forward, makes a total of 134,840*l.* They propose dividends on the preference capital at the rate of 7 per cent. and on the ordinary capital at 25 per cent. per annum, 7,500*l.* being written off patents account and 25,000*l.* placed to the reserve fund, 20,648*l.* being carried forward. The sum which it is proposed to write off patents account will raise the amount written off this account to 83,558*l.*, and will leave the account standing at 27,932*l.*; and the 25,000*l.* which it is proposed to add to the reserve fund will bring that fund up to 126,500*l.*

## Obituary.

DAVIES.—On July 30, after a long and painful illness, Richard Morgan Davies, pharmaceutical chemist, of Carmarthen. Aged 71.

RACKHAM.—On July 29, Mr. Francis Kirby Rackham, chemist and druggist, Lower Marsh, Lambeth. Aged 76.

WARNER.—On August 11, suddenly, at No. 1 West Mall, Clifton, George Thomas Warner, chemist and druggist. Aged 59.

WAVELL.—On July 24, Mr. Henry Mace Wavell, chemist and druggist, High Street, Newport, Isle of Wight. Aged 83.

WHITE.—On August 10, Mr. Thomas White, chemist and druggist, Church Street, Launceston. Aged 53. On the day of his death Mr. White distributed the prizes at the national school. In the evening he was seized with paralysis, and, never rallying, died in a few hours. Mr. White, who was 53 years of age, was a member of the Launceston Board of Health and trustee of the national school, and carried on a large business in the town for over twenty-five years.

BANKRUPTCY.—The number of "chemists, druggists, and chemical manufacturers" in whose cases receiving orders in bankruptcy have been gazetted during the seven months of 1888 ending July 31 was 31. In the corresponding period of 1887 the number was 19. "Doctors of medicine and physicians" are 9 so far against 10 in the first seven months of 1887.



## EXPORTS OF BRITISH DRUGS AND CHEMICALS.

## EXPORTS OF BRITISH CHEMICALS,

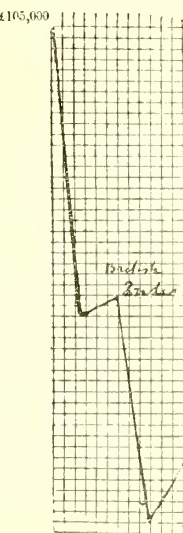
THE diagrams on this page are graphic representations of the exports of drugs and medicines from Great Britain during the past five years. They do not include the re-exports of foreign and colonial produce when these are expressly so described. They represent generally the packages sent out by the export druggists, and of course include a good many chemical manufactures, though the goods exported expressly as chemicals are represented more accurately on the next page.

It is to be remarked that the figures on which these diagrams are based indicate only *values* of the exports. As prices generally have fallen considerably, it is obvious that a straight line would indicate a large increase of trade, while on the other hand an unvarying amount of trade would require an oblique line slanting downwards.

Each square of the diagrams on this page, reckoning perpendicularly, represents 1,000*l.*, and three squares horizontally cover a year.

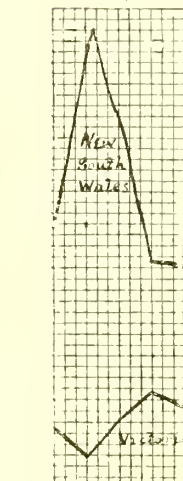
The diagrams may be read as if all the lines were shown on a single one, the only object of multiplying the diagrams being to avoid confusion by the too frequent interlacing of the lines. The best customers of Great Britain for articles classified as "drugs and medicines" are therefore British India (far above all others), then New South Wales, then Victoria, then Brazil, next the United States, New Zealand, Canada, and so on.

In order to compare each purchasing country with the total export trade done by the United Kingdom in this class of merchandise, we append a diagram indicating the course of the trade for the past five years therein. The figures in the margin each represent 1,000*l.*



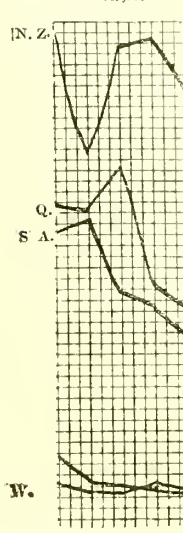
£120,000

£100,000

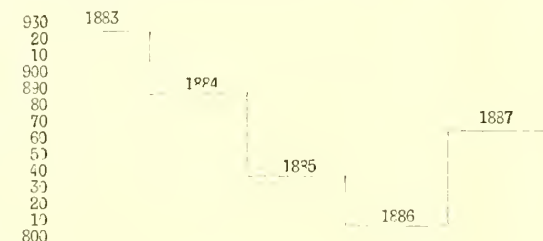


£50,000

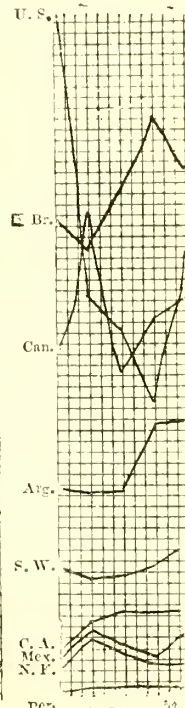
£47,000



W.

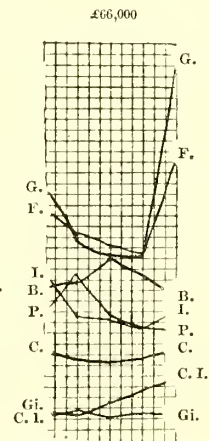


£65,000

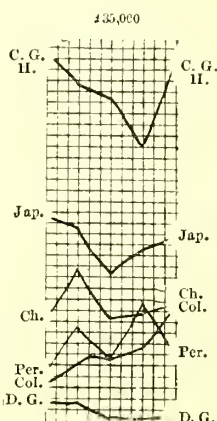


Per.

It should be explained that neither cinchona nor opium, nor any other article expressly specified in the Board of Trade returns, is included in these estimates.

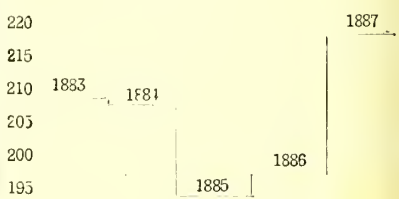


£66,000



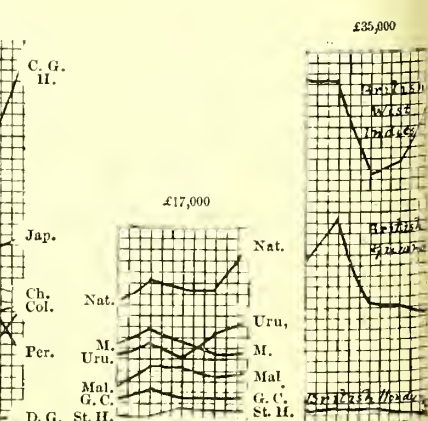
£35,000

THE diagrams printed on the page opposite are on the same plan as those given on this page, except that, as regards chemicals, each square taken perpendicularly represents 10,000*l.* The exports referred to do not include goods generally classified as "alkali," nor do they include chemicals of foreign origin when exported nominally as such. The following diagram indicates the fluctuations of Great Britain's total exports for the past five years in this class of goods, the figures indicating this time so many tens of thousands of pounds.



The following are the abbreviations used:—

New Zealand—N. Z.	Belgium—B.
Queensland—Q.	G. braltar—G.
W. Australia—W. A.	Japan—Jap.
Canada—Can.	Dutch Guiana—D. G.
Spanish West Indies—S. W.	Uruguay—Uru.
Newfoundland—N. F.	St. Helena—St. H.
Italy—It.	Norway—Nor.
Ceylon—C.	Austria—Au.
Cape of Good Hope—C. G. H.	S. Africa—Afr.
U. S. Colombia—Col.	Tasmania—T.
Mauritius—M.	Brazil—Br.
Gold Coast—G. C.	Mexico—Mex.
Sweden—Sw.	Bermuda—Ber.
Spain—Sp.	France—F.
New S. Wales—N. S. W.	Portugal—P.
China—Ch.	Channel Islands—C. I.
S. Australia—S. A.	Chili—Ch.
United States—U. S.	Natal—Nat.
Argentine Rep.—Arg.	Malta—Mal.
Central America—C. A.	Russia—R.
Germany—G.	Holland—H.
	Victoria—Vic.
	British India—B. I.



£17,000

£35,000



BRITISH AND FOREIGN CONSULS' REPORTS.

CHILI.

The following are values of the principal articles of pharmaceutical interest exported from Chili during 1885 and 1886, in Chilean lver dollars, equal to 3s. 2d. sterling:—

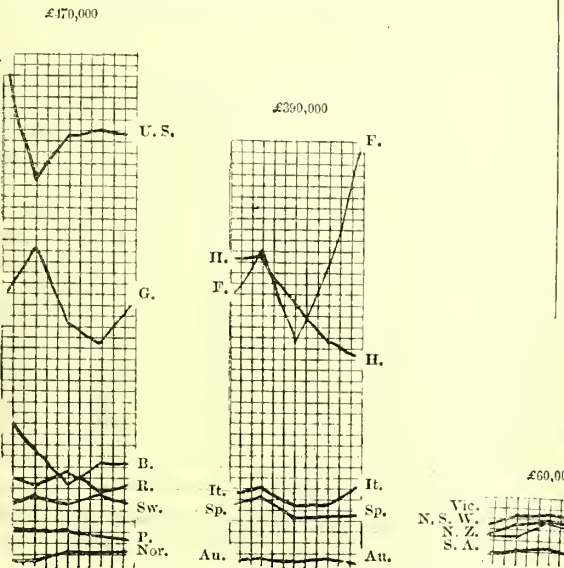
		United Kingdom	Germany	France	United States
Reswax ..	1885	20,865	33,258	5,694	—
" ..	1886	23,238	42,712	15,068	—
oney ..	1885	32,251	40,571	29,579	—
" ..	1886	45,470	45,011	24,805	—
dine ..	1885	1,352,650	606,120	—	609,150
" ..	1886	1,070,769	274,550	—	401,080
ullaya ..	1885	12,630	21,695	10,564	—
" ..	1886	19,479	28,851	32,154	3,727

ITALY.

The dregs left in the boilers in which grapes have been treated for the manufacture of alcohol are pressed, and the watery substance thus gained is led into wood reservoirs, where forms, by cooling, another important article of commerce, z., half-refined tartar, of which about 450 tons, worth 000,000f., are produced every year, and exported to Germany, France, the United States, and also, though in very small quantities, to England. A limited company with capital of 500,000f. has been formed, with the intention of working these tartars into cream of tartar and tartaric acid, and it is expected that they will begin work during the coming autumn. Wine lees are also prepared in this district by pressing and then drying up the residues of wine which form in the casks where the wine is kept. About 500 tons yearly of this stuff, to the value of 300,000f., is exported to Germany and France. The exports were as follows:—

		1887		1886	
Tartar ..	450 tons	1,000,000f.	500 tons	1,200,000f.	
Wine lees ..	500 "	333,333f.	600 "	360,000f.	

During the year 1887 Naples imported from abroad 242,387l. worth of drugs, colonial produce, and tobacco, against 553,795l. in the preceding year. Of chemicals, medicines, and perfumery, 727l. were imported in 1887, and 149,463l. in 1886.



TURKEY IN ASIA.

**Gum Tragacanth.** In 1887 the crop throughout Asia Minor was such a bad one that only half the usual quantity was brought into Smyrna, and only about 1,800 cases (of 100 to 125 kilos. each, net) were exported. Notwithstanding this, prices remained low in consequence of the severe competition between the Smyrna and the Constantinople dealers. Most of the Smyrna exports are shipped to France, England, Austria, Germany, and the United States.

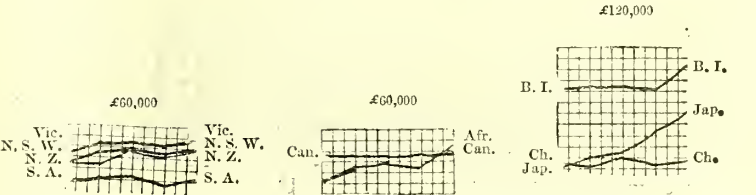
**Liquorice Juice and Root.** The accumulation of heavy stocks of root in America and the large extension of digging-grounds in Syria and along the coasts of the Black and Red Seas have brought about a heavy reduction in the value of the drug, of which about 60,000 pressed bales, each weighing about 4 cwt., are exported every year. A new juice-boiling factory was started in 1837, and its competition with the old works has reduced the price of the SC (superfine) brand from 110f. to 92f., and of VB (fine) brand from 93f. to 86f. per 100 kilos. From 4,000 to 5,000 cases, weighing 90 to 100 kilos., form the average annual export.

**The Drug Trade.** The consumption of drugs and chemicals in Smyrna is very considerable, and in 1837 alone over 1,500 packages were landed, not counting a large number of cases containing quinine preparations, mostly of inferior quality. London, Paris, Vienna, Stuttgart, and Milan have most of the Smyrna trade. The importation of German drugs, especially febrifuges (a very large article of consumption in the Levant) has much increased since 1835. Among chemicals, which are mostly procured from England, France, and Italy, and lately also from Germany, sulphur, soda, and potash salts are the principal ones. Sicilian sulphur is much used to combat the oidium or blight in the vines, while English soda finds a continually increasing employment in the flourishing local soap industry. The use of potash for drying grapes is also increasing. This article is procured from England (via Amsterdam, the cheapest route), Austria, and very largely from Cologne.

TURKEY IN EUROPE.

**Chemicals for Salonica.** A noteworthy feature in British trade at Salonica is the increasing demand for chemicals from England, caused by the development of native industries in Monastir and other districts in Macedonia. The importers, however, complain that most of these chemicals, copperas in particular—are packed in barrels made of thin staves, badly jointed and hooped, and not fit for inland carriage. The prices paid are as follows:—Indigo, Madras, 2s. to 3s.; Kurpah, 3s. to 4s.; Bengal, 4s. 10d. to 6s.; cochineal, 1s. 4d. to 1s. 6d. per lb.; alum, 6s. to 6s. 5d.; copperas, 3s. 6d. to 4s.; and sal-ammoniac, 38s. to 38s. per cwt.

**Merchants Should Combine.** French merchants desiring to extend their commercial relations with the district of European Turkey of which Adrianople is the centre are advised by the French Consul in that city to combine for the purpose of establishing a depot of French goods, under the management of an experienced local merchant knowing the habits and wants of the native population. It is suggested to allow the agent a fixed salary of, say, 10,000f. per annum, at which a suitable person might, the Consul thinks, be found without much difficulty. The combination scheme would have the advantage of reducing the incidental charges, freight, &c., on the products traded in, and prove of great advantage to its promoters. Among the articles especially saleable at Adrianople are named crude drugs and prepared medicines, soaps, essences and perfumery, spices, indigo, and fixed oils.





TRADE “**SANITAS**” MARK.

**DISINFECTANTS**

(FLUIDS, POWDER, SOAPS),  
NON-POISONOUS, PLEASANT, AND BEST.  
Gold Medals, Calcutta 1883-84, Paris 1885, Antwerp 1886.

**KINGZETT’S BACTERICIDES**

Particulars sent on application to

**THE “SANITAS” COMPANY LIMITED,**  
Letchford’s Buildings, Bethnal Green, London.

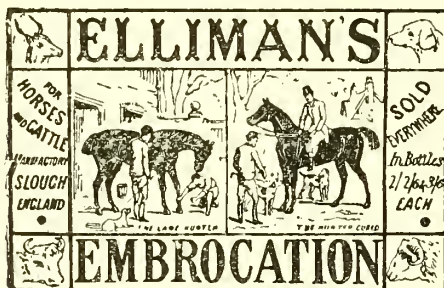
‘SECURUS JUDICATOR B IS TERRARUM’

*Apollinaris*  
“THE QUEEN OF TABLE WATERS.”

The filling at the Apollinaris Spring during  
the year 1887 amounted to  
**11,894,000 Bottles.**

SEE SEABURY & JOHNSON’S ADVERTISEMENT of  
ABSORBENT COTTON LINT AND GAUZE on page 53.

**SHOW CARDS, 24×17 or 17×12,**



Free to any Address.

**SILICATED CARBON FILTERS**  
**AERATED**

PATENT MOVABLE BLOCK.

See Advertisement, page 18 (bottom folio).

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**SALT REGAL**

In bottles hermetically sealed. 2/6 Regularly stocked by Wholesale Houses.  
Usual Trade Terms. Sole Proprietors—

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**MUMFORD’S**  
**PURE STARCH POWDER**

In 56-lb. and 1 cwt. bags, 26s. ; in 7, 14, and 28-lb. bags, 28s. per cwt. net,  
bags included, delivered free in London. [1]

G. S. MUMFORD, STEAM MILLS, FARRINGDON ROAD, LONDON, E.C.

*Do you make your Tinctures and  
Infusions with Fletcher’s New  
Liquors? If not, send to the  
Manufacturers for a Trial Sample.*

**EDITORIAL NOTES.**

**STATISTICS OF THE MEDICAL  
PROFESSION.**

A VERY interesting report, edited by Mr. W. J. C. Miller, the Registrar to the Medical Council, has just been issued under the authority of the Statistical Committee of that body. It is the first part of an investigation as to the geographical distribution of medical men in this country. The facts given are taken from the official register, and for the purpose of the present inquiry those relating to England and Wales only have been selected; the facts concerning Scotland and Ireland are to be published subsequently.

The two years 1881 and 1886 are adopted for this census, and comparisons are instituted between the statistics of those two years. It is intended to continue this quinquennial analysis, the first coinciding with the census years of the whole population, and the second equally dividing these periods.

At the end of 1881 there were residing in England and Wales 15,022 registered medical practitioners; at the end of 1886 the number was 16,930. Calculation shows that in the former period each had an average area of 2,479 acres, but that in 1886 this average area was reduced to 2,199·6 acres. It also appears that the number of medical practitioners is increasing at a greater ratio than the population of the country; for while in the former year there was one practitioner to each 1,747 inhabitants, the proportion became one to 1,662 in 1886. In other words, the net increase of the medical profession was 826 over and above the proportion necessary to keep pace with the increase of population.

The foregoing figures do not convey much useful information, however, until they are supplemented by more details; and these the report goes on to give. The next section shows where medical men do most congregate and where they are sparsely scattered. In London they increased from 3,837 in 1881 to 4,467 in 1886—that is, 1 to 1,007 inhabitants in 1881, and 1 to 939 in 1886. Dividing England and Wales into districts, and omitting the metropolis, it appears that the proportion of medical practitioners to the population generally stands as under in the two years :—

—	1881	1886	1881	1886
	Number of Practitioners.		One to	
South-Eastern ..	1,803	2,074	1,374	1,284
South Midland ..	874	919	1,841	1,849
Eastern ..	665	695	2,087	2,098
South-Western ..	1,239	1,341	1,495	1,372
West Midland ..	1,432	1,565	2,139	2,065
North Midland ..	753	796	2,240	2,293
North-Western ..	1,793	2,073	2,319	2,209
Yorkshire ..	1,206	1,448	2,423	2,192
Northern ..	751	800	2,181	2,239
Wales ..	669	751	2,389	2,239

London, as might be expected, including as it does so many practitioners whose patients are scattered over the



whole empire, numbers more than a double proportion when compared with the extra-metropolitan area. Other tables show that the Registrar-General's well-known twenty-eight large towns, which (including London) had in 1886 a total population of 9,142,951, monopolised the services of 7,120 medical men; while the rest of the country, with a total population of 18,992,964, was attended to by 9,810 qualified doctors. That is to say, 42 per cent. of the whole medical army is employed to protect the 9,000,000 inhabitants of the large towns, while the remaining 19,000,000, scattered over a vastly greater area, are left to the care of the other 58 per cent. This brings out the curious result that country doctors hold on an average a *clientèle* nearly twice as extensive as that which suffices for their urban brethren. Which are the more generally prosperous it is beyond the power of the registrar to indicate. It is shown in another part of the report that the country practitioners are generally better qualified than those in the towns. Among the former there are but 12.16 per cent. of only singly qualified men, while in the towns there are 16.30 per cent.

The tables showing the distribution of practitioners in the large towns and counties is of considerable interest, and we note it entire as it is given for 1886:—

Large Towns.	Average Number of Persons to each Practitioner in 1886.	Large Towns.	Average Number of Persons to each Practitioner in 1886.
Brighton ..	726	15. Preston ..	2,213
London ..	939	16. Nottingham ..	2,232
Plymouth ..	1,130	17. Hull ..	2,232
Bristol ..	1,232	18. Birkenhead ..	2,245
Newcastle-on-Tyne	1,406	19. Halifax ..	2,250
Manchester ..	1,506	20. Leeds ..	2,250
Huddersfield ..	1,541	21. Sunderland ..	2,295
Liverpool ..	1,564	22. Derby ..	2,323
Portsmouth ..	1,740	23. Cardiff ..	2,333
Birmingham ..	1,779	24. Sheffield ..	2,593
Norwich ..	1,848	25. Bradford ..	2,722
Wolverhampton ..	2,032	26. Blackburn ..	3,129
Bolton ..	2,109	27. Oldham ..	3,147
Leicester ..	2,175	28. Salford ..	3,908

The following is a similar list of the counties, exclusive of the large towns:—

Counties, Rural Portions.	Average Number of Persons to each Practitioner in 1886.	Counties, Rural Portions.	Average number of Persons to each Practitioner in 1886.
Somersetshire ..	1,217	28. Carnarvonshire ..	1,851
Devonshire ..	1,217	29. Denbighshire ..	1,867
Hampshire ..	1,224	30. Gloucestershire ..	1,899
Westmoreland ..	1,250	31. Suffolk ..	1,903
Surrey ..	1,235	32. Norfolk ..	1,913
Sussex ..	1,318	33. Lincolnshire ..	1,969
Kent ..	1,352	34. Cumberland ..	2,061
Cambridgeshire ..	1,390	35. Brecknockshire ..	2,094
Berkshire ..	1,432	36. Northumberland ..	2,109
Herefordshire ..	1,447	37. Cheshire ..	2,184
Merionethshire ..	1,459	38. Carmarthenshire ..	2,250
Oxfordshire ..	1,467	39. Leicestershire ..	2,255
Radnorshire ..	1,500	40. Huntingdonshire ..	2,283
Rutlandshire ..	1,505	41. Nottinghamshire ..	2,296
Shropshire ..	1,521	42. West Riding, Yorkshire ..	2,319
Dorsetshire ..	1,545	43. Monmouthshire ..	2,350
Warwickshire ..	1,621	44. Essex ..	2,408
Bedfordshire ..	1,645	45. Pembrokeshire ..	2,414
Hertfordshire ..	1,704	46. Lancashire ..	2,473
Cardiganshire ..	1,713	47. Worcestershire ..	2,656
Cornwall ..	1,733	48. Buckinghamshire ..	2,717
North Riding, Yorkshire ..	1,743	49. Glamorganshire ..	2,751
Wiltshire ..	1,757	50. Northamptonshire ..	2,821
Middlesex ..	1,760	51. Durham ..	2,835
East Riding, Yorkshire ..	1,831	52. Derbyshire ..	3,075
Anglesey ..	1,844	53. Flintshire ..	3,326
Montgomeryshire ..	1,847	54. Staffordshire ..	3,352

The ultimately most important result remains to be given, and we are glad to find that the Registrar does not shirk it. On the contrary, he states it with what seems to be something like relish—certainly in language which may be taken for irony. The question must occur to every inquirer, How does the proportion of medical men correspond with the death-rate? It must be admitted that the statistics given under this heading are not on the whole glorious for the profession. We prefer, however, on this point to quote the Registrar's own summary of his statistics. He says:—

"A close examination of this table reveals the fact that the comparative death-rate of a division is independent of the mere number of practitioners in that division. Thus, London, which has the greatest proportion of practitioners—that is, as a division; Brighton has most as a large town—is, as regards its death-rate, next to the highest, the highest being the North-Western. Again, on comparing the Eastern and the South-Western divisions, we find that the former has fewer practitioners by far, and yet a lower death-rate.

"Nor does the death-rate appear to decline in a particular division as the profession increases, except in London and Yorkshire. It is true that in the South Midland, the Eastern, and the North Midland districts the death-rate increased as the profession declined, but the increase of the former was out of all proportion to the declension in numbers of the latter. Moreover, in the South-Eastern, the South-Western, the West Midland, the North-Western, and the Welsh divisions, as the profession became more numerous the death-rate ran up; whilst in the Northern division, as the profession became proportionately less numerous, the death-rate also declined. There would thus seem to be a limit to the requisite number of practitioners in a district to produce the most beneficial results. But the fluctuations in the death-rate are such that there need be no damage experienced to the professional *amour propre*. This is clearly shown in the last line, giving the death-rates for England as a whole."

We can only say that if the medical *amour propre* is soothed by the figures in this last line, it is very moderate. They indicate only that while in 1881, with a proportion of one doctor to 1,747 persons, the death-rate of the whole country was 18.9, in 1886, with one doctor to 1,662 persons—that is with greater medical advantages—the death-rate had increased to 19.3.

## CARBOLIC ACID IN GINGER-BEER BOTTLES.

"At Wednesbury, on Sunday night, an elderly man named Edward Langley visited a neighbour in Wilcroft Street, and was asked to have ginger beer. By mistake a man gave him a ginger-beer bottle containing carbolic acid. He drank some of the liquid, and it was immediately discovered that he had drunk acid. A surgeon was promptly in attendance, and used the stomach-pump. Langley, however, died, after suffering excruciating agony for an hour." Paragraphs more or less like the one just quoted occur in London and provincial papers with frightful regularity. This is only one out of three similar occurrences which we report in our provincial news this week. Liverpool alone is averaging two deaths from carbolic acid poisoning per week. We have again and again directed attention to the many perfectly preventable deaths due to the reckless sale of the substance, generally by oilmen. Carbolic acid seems to be generally supplied in cups, wine bottles, and ginger-beer bottles; the latter seem to be the generally preferred vehicles. In most cases no labels are attached, and there are, no doubt, at this moment many gallons of the deadly stuff standing around in such receptacles, and a number of thirsty throats drawing near to their horrible fate. But let it be understood that it is perfectly legal to supply carbolic acid in the same easy fashion as milk is sold. The Pharmaceutical Council some years ago



brought the matter under the notice of the Privy Council, and proposed the addition of carbolic acid to the schedule of poisons; but the latter body did not see the necessity, and the noble statesman then at the head of the Privy Council told his complacent brethren in the House of Peers that carbolic acid was only "rather poisonous." From that time to the present it has been steadily improving its position in the Registrar-General's list of deaths from poison, and for some time past has figured as a good second in that respect. The medical department of the Privy Council is specially charged in the interests of the public with the supervision of the laws affecting the sale of poisonous substances; evidence and recommendations have been brought to their notice again and again, and their practical refusal to exercise the powers which have been entrusted to them is, if not explainable, little short of disgraceful.

#### OUR TRADE IN CINCHONA BARK.

IN our market report we publish this week an interesting table giving the weight and value of cinchona bark imported into and reshipped from the United Kingdom during the last five years, from and to the principal countries with which we deal in that commodity. These statistics show that from 1883 to 1887 inclusive we have imported into the United Kingdom 639,360 cwts. of cinchona, and re-exported 534,127 cwts., leaving for our own consumption 105,233 cwts. in five years' time, or, say, about one-sixth of our entire imports. If we take into account the fact that we entered upon the year 1883 with the stock of 3,500 cases and casks and 67,176 serons cinchona, or, say, an aggregate of 74,176 cwts., and were left at the end of 1887 with a supply, in the first hand, of 11,333 cases and casks and 48,286 serons, or about 70,952 cwts., altogether, we find that we must add about 3,224 cwts. for the decrease in our stock to the balance of 105,233 cwts. excess of imports over re-exports to arrive at the nearest possible estimate of our actual consumption of cinchona for all purposes. This, upon the above-named basis, has averaged about 21,691 cwts. per annum since 1883, less, of course, than we export to Germany alone, directly and *via* Holland, but still a respectable enough quantity. Looking at our cinchona imports, we find that their aggregate value has been steadily declining since 1883, though in weight they show an almost equally uninterrupted growth. The cinchona imports from British India are expanding considerably, although even yet they weigh scarcely one-tenth part as heavy as the supplies from Ceylon. France (Holland not being specially named in the returns) is the only European country from which we receive any cinchona supplies of importance, and even she does not furnish us with much more than 1 per cent. of our entire imports. We receive from France principally South American barks of the cuprea and Maracaibo varieties, which are brought to Havre by the steamers running from that port to Venezuela, Colombia, and Central America. Of South American countries, Ecuador has almost ceased to send us any bark at all, notwithstanding that the Guayaquil, Huanoco, and Loxa cinchonas, which are usually imported from that country, have suffered proportionately less depreciation than most other varieties. But Ecuador in 1886 and 1887 passed through some political squalls of more than usual severity, and this may, partly at least, account for the hiatus in the supply from that quarter, while, moreover, the forests easiest to reach have been quite denuded of bark, and the present prices do not make it profitable to collect it in out-of-the-way places. The imports from Colombia are also dwindling, but most of the bark shipped from the ports in that country, Cartagena, and Maracaibo, is sent to the United States. The forests in the State of Santander, however, where the bark

called, from its copper-like colour, "Cuprea" was discovered about thirty years ago, are now partly exhausted, and the depreciation of this bark, which was worth up to 2s. 6d. per lb. in 1880 and now fetches only about 3½d. per lb., does not encourage the bark-hunters to take any very great pains in procuring fresh supplies. Bolivia is not specially mentioned in the returns which we have compiled. The country is completely cut off from the sea since the Chilian war, and therefore, although no doubt the largest producer of cinchona in America, the Bolivian barks figure, without exception, in the returns from her neighbours, Chili, Colombia, and the Argentine Republic. The Bolivian plantations, which now furnish such excellent yellow bark, are situated in the neighbourhood of Cochabamba, on the eastern slope of the Andes, and the cultivators find it cheaper to ship their goods by the comparatively easy, though long, water-way along the Pilcomayo and Paraná rivers to Buenos Ayres or Montevideo on the River Plate, than to send the bark by a much shorter route across the difficult mountain passes. In a like manner the flat Calisaya bark, procured from the wild trees found in out-of-the-way forests, are mostly despatched by river through Brazil or the Argentine Republic. But if, as is probable, the exports of cinchona from Bolivia should assume abnormal proportions this year in consequence of the abolition of the export duty, we shall probably be able next season to publish statistical information concerning the shipments from that country. The sudden doubling of the value of cinchona received from various less important countries is probably owing to the increased shipments from Jamaica and Africa, and to the fact that more Java bark has been sent to London for sale, either direct or *via* Holland. As regards our export trade in cinchona, the returns are valuable as showing at a glance that our re-shipments are drifting more and more towards Germany and America. France, which is our best customer for South American cinchonas, takes an average of about 12,000 cwts. per annum, and the amount of her purchases varies very little, but our shipments to Germany (including Holland and Belgium), which were only 40,675 cwts. in 1883, have gradually expanded to 70,692 cwts. in 1884, 67,950 cwts. in 1885, 74,481 cwts. in 1886, and 74,360 cwts. in 1887. We must add to this the increasing quantities bought every year by Germany at the Amsterdam auctions, and the figures, therefore, go a long way to prove that in spite of the low quinine prices there must still be a margin for the manufacturers to work the bark, since it cannot be supposed that the stock of a depreciating article is merely left to accumulate in Germany. Of course, we do not claim for our figures that they absolutely prove this contention, but still, taken in conjunction with other available statistics, they unmistakably point in that direction. Next to Germany the United States are our best customers for cinchona, and to this country also a very large increase in the shipments is shown, the excess of quinine thus shipped in the bark fully counterbalancing the decrease in the imports of prepared quinine into the States. Italy also buys more and more bark every year, the fall in the shipments in 1885, consequent upon the failure of the Milan quinine works, being the only exception.

#### HAMBURG AND THE ZOLLVEREIN.

THE absorption of the ancient Hanseatic towns of Hamburg, Bremen, and Bremerhaven into the German Zollverein will become an accomplished fact on October 1 next, and, in anticipation of the impending change, business in the Free City appears to be in a somewhat perturbed condition just now. The Hanseatic League at the period of its greatest power, in the fourteenth and fifteenth centuries, included a large number



of the most thriving trading cities then existing, not only in Germany, but in what are at present the States of Holland, Belgium, and Russia. The three cities which, a few weeks hence, will be practically extinguished as self-governing communities, form the last of this once powerful organization, and they have opposed as long as they could their absorption into the Zollverein. But when, eighteen years ago, Germany became a united country, and the trade of the Empire increased in an undreamt-of manner, the fate of the free ports was practically sealed. They were an anomaly, a State within a State, a hindrance to the unfettered development of the Empire behind them, and, above all, a powerful obstacle to the consummation of the Protectionist policy which Prince Bismarck embraced some years ago. The position of Hamburg especially, the premier port of Germany, became an exceedingly difficult one when for the rest of the country a fiscal policy was adopted involving frequent collisions with other countries, for whom the free towns were part of greater Germany, while, so far as the Zollverein is concerned, Hamburg and its sisters were practically foreign countries. It must be said that the pill which the 11 Hanse towns have been forced to swallow has been generally gilded, for from no other point of view than that of indirect bribes can we regard such measures as the subsidizing of the new German steamship lines, and the works now in progress of construction, mostly with Imperial money, for increasing the commercial facilities which Hamburg and Bremen have to offer. Everything that the German Government can accomplish is set in motion to render Hamburg the principal port on the Continent, or, if possible, of Europe. At present, although she has immensely progressed during recent years, the city on the Elbe is still far behind London and Liverpool as a trading centre, while the Continental ports Antwerp takes precedence over her; but it seems beyond doubt that she has within the last twenty years advanced comparatively much faster than any one of her principal rivals. In how far the trade of Hamburg will be affected by her pending inclusion into the Zollverein it is difficult to conjecture, but it should be noted that the German Government have been careful to give whatever facilities they could for the preservation of those industries which had sprung up in the city by virtue of her position as a free port. So far as the drug trade is concerned, the principal interest in the annexation of Hamburg to the Zollverein lies in the effect it will exercise upon the manufacture of spirituous medicinal preparations, of which industry that city at present virtually holds a monopoly. It has been pointed out before in our columns, and it is now fully confirmed, that the German Government will take care to interfere as little as possible with this trade, which may well be carried on in future in certain localities set apart for the purpose on the islands on the southern side of the River Elbe. It would be well if our own Customs authorities could show a similar solicitude in the welfare of British industry, and do something to bring to a satisfactory solution the negotiations for the manufacture of tinctures in which which have been pending so long, and which, with a little pliability on their part, might have been arranged months ago. Among the preparations which are now being made to preserve for Hamburg a front place among the great trading cities of the world are the construction of many new wharves and warehouses in portions of the town which have been recently pulled down. Electric light will be supplied both at Hamburg and Bremen on a very extensive scale. The plant at the former port will supply 4,200 incandescent lamps, each of sixteen normal candles, and thirty arc lights of great strength. Six incandescent lamp diamos will be used, driven by three compound steam-

engines of 2,000-horse power each. It is stated on good authority that Manchester and Bradford merchants are continually making greater use of the shipping facilities of Hamburg by sending their goods *via* Hull to the German city for transshipment by the new German steamers; and in connection with this it is also observed that during last year the lines of vessels which run between the Elbe and East Asia, West Africa, the West Indies, and the West coast of America had to increase their sailings, while weekly sailings to the La Plata States were begun. The Baltic Sea trade also increased largely in 1887, and the Hamburg-American Packet Company has undertaken the construction of new swift steamers. The number of vessels which arrived at Hamburg during 1887 exceeded 7,000, the tonnage being nearly four million.

One of the most alarmist of all the British consular reports received last year was that from Santiago, in Chili, in which the writer, Vice-Consul Thomas, attempted to prove by elaborate diagrams that our trade with the most flourishing countries on the South American West Coast was fast dwindling to zero. Mr. Thomas's statements were challenged in many quarters at the time, and indirectly contradicted by his own colleague in Valparaiso, the Chilean capital; but they furnished material for a great many articles, despondent and jubilant, in the British and foreign press. Since last summer Mr. Thomas has recovered from his pessimistic attack, and in his report, just to hand, of the foreign trade of Chili in 1886 he "strikes the light guitar" of satisfaction with the past and hopefulness for the coming year. For in 1886 Great Britain has considerably improved her position in Chili. The total imports into Chili rose from \$40,096,629 in 1885 to \$44,170,147 in 1886, and of this increase \$1,317,241, or about one-third, falls to the share of this country. British imports into Chili thus show an increase of 8.49 per cent. on the preceding year, while those of France have fallen no less than 10.50 per cent., and of the United States 3.60 per cent. in the same period. German imports, however, have increased still faster than our own, the growth being no less than 17.28 per cent.; but it lies principally in rice and tea, whereas the British imports have grown more especially in various branches of manufactured goods. Empty medicine-bottles and candles (composite and sperm) are almost entirely bought from Germany, while in the perfumery branch that country is making rapid progress, and Vice-Consul Thomas thinks that it would be well worth the while of English manufacturers and traders to pay more attention to these important branches. The value of the imports of drugs in Chilean silver dollars of 3s. 2d. sterling are given as follows:—

	1885	1886	Increase
Germany .. .. .	\$ 150,000	\$ 204,000	\$ 54,000
United Kingdom .. .. .	120,000	149,000	29,000
France .. .. .	59,000	92,000	33,000

While the figures for perfumery are—

	1885	1886	
France .. .. .	\$ 29,600	\$ 27,200	Decrease 2,400
United Kingdom .. .. .	10,000	23,500	Increase 13,500
Germany .. .. .	4,000	14,000	" 10,000
United States .. .. .	2,600	6,300	" 3,700

In assorted empty bottles Germany held the market in 1885, when the figures were:—Germany, \$67,500; France, \$18,500; United Kingdom, \$6,300. But in 1886 she lost a great part of her ascendancy, the returns for that year being—Germany, \$22,000; United Kingdom, \$15,500; France, \$8,500. In candles again a similar tale is told, for we find that in 1885 Germany exported \$473,000; United Kingdom, \$70,000; France, \$38,000. And in 1886—Germany, \$438,000; France,



\$119,000; United Kingdom, \$82,000. These are but a few instances of the displacement of trade which is taking place in Chili, and which on the whole distinctly confirms the view expressed by us a year ago that British goods continue to make steady progress, though not so much, of late years, as German, but that the rapid, not to say inflated, increase of German trade is taking place at the expense of France rather than of this country.

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Chemical Combination by Pressure. Some remarkable experiments are reported by Mr. W. Spring, an American chemist, which tend to explain in some degree the chemistry of creation. Mr. Spring's preliminary experiments have been made with the ordinary constituents of the earth's crust, especially with the carbonates and sulphates of barium and calcium. In one series of tests, a mixture of pure dry precipitated barium sulphate and carbonate of soda was subjected to a pressure of 6,000 atmospheres. The amount used in each trial consisted of  $\frac{1}{4}$  grm. of barium sulphate and  $\frac{3}{4}$  grm. of sodium carbonate. After a single compression it was found that about 1 per cent. of the barium salt was changed into carbonate. The solid block resulting from the first compression was ground to powder, and again subjected to pressure, with the result that an increase of 4 per cent. of barium carbonate was obtained. When the mixture was left in the press for fourteen days the amount of barium sulphate which changed to carbonate amounted to 11 per cent. When the experiment was reversed by mixing 3 parts of sodium sulphate and 1 part of barium carbonate, the first compression changed 59 per cent. of the barium carbonate into sulphate, and six compressions converted 73 per cent. The continuance of the pressure for a period of fourteen days increased the amount of changed barium salt to 80 per cent. It appeared that heat was unfavourable to these reactions. A block in which 10.89 per cent. of the original barium sulphate was changed into carbonate contained only 9.89 per cent. of the carbonate after an exposure to a temperature of 248° F. for three hours, and repeated trials demonstrated the fact that an elevation of temperature was always followed by a similar decrease.

\* \*

The Teaching of Chemistry. Professor Tilden is to preside over the Chemical Section at the Bath meeting of the British Association. His address will be concerned with the history of the teaching of chemistry practically, and will review the existing provision for efficient teaching of chemistry in this country. This will be followed by some discussion of the methods actually used or proposed for teaching chemistry either as a constituent part of a liberal education or for technical purposes, together with an endeavour to trace the causes of the unproductiveness of the English schools in respect to advanced studies, and especially in regard to the results of original research. Professor Tilden's address will probably create much interest among his brother-chemists. Otherwise nothing very exciting is likely to happen in this section. It is hoped that there will be a discussion on valency opened by Professor Odling, while an effort will be made to raise a discussion on the report of the Committee on the Teaching of Chemistry in Schools.

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Influencing the Pharmaceutical Society. Some of our correspondents advise that, in order to make a clean sweep of all their grievances, chemists should join the Pharmaceutical Society *en masse*, and, having joined it, first reform that body, and then obtain an Act of Parliament which should establish them and their business on a sure foundation for ever and ever. The programme has an air of simplicity which suggests a freshness of faith on the part of the writers in their brethren, in the Society, and in parliamentary innocence, which it seems cruel to disturb. But we cannot imagine that they can have anything like enough co-enthusiasts to bring their ideas within the widest limits of feasibility. In the first place, it has been proved by repeated experience that no ten chemists anywhere can agree on any ten lines of a Bill to redress their grievances, or even as to what are their definite grievances. Secondly, we venture to doubt whether our

friends who so glibly draft the title of a Chemists' Protection Bill have ever tried in the remotest recesses of their minds to definitely plan its details, and they cannot have considered how completely it is opposed to every principle of modern British legislation. Lastly, we may be permitted to question the possibility of the conversion of the Pharmaceutical Society by the absorption of any available number of the at present outsiders. We should as soon expect to see the Ethiopian's skin become white when he got a bit fatter.



AND

## Literary Notes.

*An Index of Symptoms, as an Aid to Diagnosis.* By Ralph Winnington Leftwich, M.D., late Assistant-Physician to the East London Children's Hospital. Smith, Elder & Co.

THIS thoroughly practical little volume, bearing internal evidence of the conscientious care with which it has been arranged, will be a welcome contribution to medical literature. Its object is to provide a short cut to a correct diagnosis. The "symptoms" are arranged under the headings "Interrogation" and "Observation," the former referring chiefly to subjective aids, the latter to objective phenomena, neatly classified for ready reference; and these are followed by chapters on "Qualifying Considerations" and "Methods of Diagnosis," wherein will be found many useful hints. We strongly recommend the work to the notice of young practitioners.

*Dictionary of Pharmaceutical Synonyms.*—A second edition of the "Dictionary" compiled by Mr. W. E. Pritchett (West Cowes, I.W.), and published at 1s. It contains 37 pages of "synonyms," some of them unusual, and therefore useful to have in handy form. But it is far from being complete. For instance, we have "Benne oil" as the synonym of oleum sesame, but no mention of "gingelly oil." The omissions are numerous, and the errors not a few. For example—Araroba powder and Goa powder are not "chrysarobinum"; that is made from the powder. Nor is oil of tar the official "Creasotum," nor "Pulvis Jacobi" "Pulvis antimonalis"; and although we may give vaseline for "paraffinum molle," it does not follow that when vaseline is asked for paraffinum molle may be given for it. It should not be forgotten that synonyms, strictly speaking, are words of the same language which have similar significations. In that respect the English and Latin names of an article are not synonyms. In these respects the dictionary errs.

*Introductory Inorganic Analysis.* By Ernest H. Cook, D.Sc., F.C.S. London: J. & A. Churchill, 1888. 8vo. Pp. 44.

THIS is a first course of chemical testing limited to qualitative methods. The author's style is good on the whole. He aims to give as few tests as possible, so that the beginner may not be confused, and consequently he generally gives those tests which are reliable and most common. We cannot say, however, that the work is perfect. For example, in testing mercurous nitrate the student is directed to heat a little in a dry test-tube, noting (1) red fumes, (2) salt changes colour, and (3) a grey sublimate of mercury is obtained. In testing mercuric chloride he is told to repeat this experiment. "Same result will be obtained (*i.e.* production of Hg)." If an inquisitive student of pharmacy compares this with the Pharmacopœia, he will wonder what the latter means by stating that mercuric chloride "when heated sublimates without decomposing or leaving any residue." Then the author's English is faulty—"the phenomena *is*," and "one or sometimes two *is* given," are two of the gems. This is more than we should have expected of a Doctor of Science of the London University.



## Trade Report.

**Notice to Retail Buyers:**—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., August 16.

THE week has been a very quiet one indeed in the drug and chemical branches, although a decided improvement in the heavy chemical trade is reported from the North, an improvement which seems all the more healthy because it has been caused not by reckless speculation, but by a genuine and steady improvement in freights all over the world, but especially from America, North and South, the Baltic, and the Black Sea. In fine chemicals there is very little change. Citric and tartaric acids and quinine are trending lower, and in opium there is little business going, though morphia remains firm. Refined camphor and cocaine have been reduced in price. Glycerine is still advancing. The cinchona auctions on Tuesday passed off readily, with, perhaps, just a slight advance. In dry-groceries there is little doing, but the cocoa butter is much dearer, and gambier, cutch, and shellac are steady. Chamomiles have much declined in value. Spices remain dull, with the exception of Zanzibar cloves, in which a brisk trade is doing. For balsam copaiba higher rates are reported to have been paid.

**ACID (CITRIC).**—Very flat at 1s. 6 $\frac{3}{4}$ d. per lb. We hear from Messina that the stock of lemon and bergamot juice in Messina and the neighbourhood "has been ascertained to amount to about 800 pipes," and also that the prospects for the coming crop look very favourable at present.

**ACID (OXALIC)** rather neglected at 3d. per lb., while *Salicis* is entirely nominal at 5 $\frac{1}{2}$ d. to 5 $\frac{1}{4}$ d. per lb.

**ACID (TARTARIC).**—Very quiet at 1s. 5 $\frac{1}{4}$ d. to 1s. 5 $\frac{1}{2}$ d. for foreign, and 1s. 5 $\frac{3}{4}$ d. nominally for English brands.

**AMMONIA SALTS.**—Carbonate fairly steady at 4d. per lb., less heavy discount, or, say, 3d. per lb. net cash. *Sal ammoniac* still maintains its price of 34s. for first, and 32s. for second quality, and is in good demand. *Sulphate* without much inquiry. Grey, 24 per cent., Beckton terms, quotes 11 $\frac{1}{2}$  12s. 6d.; all, 11 $\frac{1}{2}$  7s. 6d.; and Leith, 11 $\frac{1}{2}$  5s. per ton.

**ARSENIC** very steady at 12 $\frac{1}{2}$  10s. to 12 $\frac{1}{2}$  15s. per ton for soft white powder.

**BALSAM COPAIBA.**—The upward movement which has occurred in Hamburg and New York has reacted on our market, where the stock is said to be very small, and during the week business in fine *Maranham* balsam at 2s. 5d. per lb. is reported. Holders are now said to ask 2s. 6d. per lb. for similar balsam, but we have not heard of any further business. In Hamburg the article is very firmly held, and 76 cases fine *Maracaibo* are reported to have changed hands last week.

**BALSAM PERU.**—Hamburg is firm, and speculators there are said to be busy buying up whatever parcels they can lay their hands on. We hear it reported that a number of adulterated parcels are now being offered as quite pure and holding the benzene test. This practice is said to be possible because of the unreliability of that test.

**BLEACHING POWDER** remains firm at 8 $\frac{1}{2}$  5s. per ton on the spot in London, and 7 $\frac{1}{2}$  6s. 3d. to 7 $\frac{1}{2}$  7s. 6d. on the Tyne.

**BORAX.**—English refiners still quote 30 $\frac{1}{2}$  per ton, but there are second-hand lots offering as low as 28 $\frac{1}{2}$  10s. per ton.

**CAMPHOR.**—Crude is not quite so firm, although it is said that much less will be available from China this season than last. Prices are merely nominal at 77s. 6d. to 80s. for Japan at the spot. English makers have reduced their quotations

for Refined camphor, and now quote bells at 1s. 1 $\frac{1}{2}$ d., and tablets at 1s. 1 $\frac{1}{2}$ d. to 1s. 4d. per lb.

**CHAMOMILES.**—The Belgian crop, of which the first supplies are just arriving, will be an exceptionally large one this year, the high values of the preceding season having caused the growers to devote an increased acreage to the crop, and the weather having been favourable to the development of the flowers, the price has tumbled down within a few days from 95s. to 65s. per cwt. It is thought quite probable that it may go lower still.

**COCAINE.**—English has been reduced in price, and German is quoted for quantities at 20s. 6d. to 21s. per oz. in bulk.

**COCOA BUTTER.**—The monthly auctions of *Cadbury's* cocoa butter took place on August 14, when 300 cases at 2 cwt. each (A) were offered and disposed of, with brisk competition, at an advance of 2d. to 2 $\frac{1}{2}$ d. per lb. on the last sales, equal to from 15 to 20 per cent. From 1s. 1 $\frac{3}{4}$ d. to 1s. 2 $\frac{1}{2}$ d. per lb. was realised.

**CINCHONA.**—The total quantity offered for public sale on Tuesday was somewhat smaller than that catalogued for the preceding auctions (3,779 against 4,179 packages), but on Tuesday more Eastern barks, forming on the whole a very good assortment, were shown, the catalogues consisting of 1,907 packages *Ceylon*, including a large quantity of Hybrid bark, but little *Officinalis*. For *Ceylon* bark there was a fair, though by no means excessive, competition, and three-fourths of the supply offered sold at fully last auction's rates, and in some cases at about 5 per cent. advance. Of *Indian* barks, 442 packages were offered, mostly from Southern India (Nilgiri Hills), but the demand was rather slack. *Java* cinchona was in better supply than usual, 190 packages *Ledgeriana*, including no particularly fine lots, being offered and sold. *South American* cinchonas, finally, were represented by 1,240 packages, mostly *Cuprea* (506 packages), which is at present a veritable drug in the market, and of which parcels imported several years ago are being constantly offered for sale. Of *Bolivian* *Calisaya* bark there were 427 packages, and the rest was made up of 189 packages *Pitayo* and 118 soft *Colombia*. A few lots were disposed of. The unit is generally estimated at 2d. to 2 $\frac{1}{2}$ d., or very slightly in excess of the preceding auctions, and the principal buyers were the agents for the Mannheim and other German factories. The prices realised were as follows:—**CEYLON CINCHONA.**—*Succirubra*—Dust, 3d.; ordinary and branch to fair stem chips, 1 $\frac{1}{2}$ d. to 4d.; good strong chips, 4 $\frac{1}{2}$ d. to 5 $\frac{1}{2}$ d.; spoke shavings, common to fine, 2 $\frac{1}{2}$ d. to 5 $\frac{1}{2}$ d.; root, including "renewed" lots, 2d. to 5d.; quill, fair to good stout silvery druggists', 6d. to 9d.; renewed, medium to fine, mostly shavings, 4 $\frac{1}{2}$ d. to 8d. **OFFICINALIS**—Chips, small branchy to fine bold stout stem, 3d. to 6 $\frac{1}{2}$ d.; root, 4 $\frac{1}{2}$ d. to 8 $\frac{1}{2}$ d. **HYBRID, &c.**—Chips, weak to fine *Ledger*, 2 $\frac{1}{2}$ d. to 7d.; root, 4d. to 4 $\frac{1}{2}$ d.; quill, bright, 9d. A few packages very fine bright natural *Ledger* spoke shavings, 1s. 5d. per lb. **INDIAN CINCHONA.**—*Succirubra*—Siftings, 1d. to 2d.; ordinary to fine stem chips, 2 $\frac{1}{2}$ d. to 6 $\frac{1}{2}$ d. **OFFICINALIS**—Branch, 1d.; shavings, 4 $\frac{1}{2}$ d. to 5 $\frac{1}{2}$ d.; root, including renewed, 6d. to 11d. **HYBRID**—Branch, 2 $\frac{1}{2}$ d. to 5d.; chips, 4d. to 5 $\frac{1}{2}$ d.; root, 10 $\frac{1}{2}$ d.; thin weak quill, 9 $\frac{1}{2}$ d. per lb. **JAVA CINCHONA.**—*Ledgeriana*—Chips, young to fair quilly, 3d. to 6d.; good stout strong, 7d. to 9d.; root, 9d. to 11d.; branch and siftings, 2d. to 3d. per lb. **SOUTH AMERICAN CINCHONA.**—*Calisaya* from the Bolivian plantations, in quills, fairly good to strong and of fine appearance, 8d. to 10d.; old *Cuprea*, 3 $\frac{1}{2}$ d.; and common *Pitayo* at  $\frac{1}{2}$ d. to 1d. per lb. The imports of cinchona into Germany during the first half-year of 1888 were 1,843,100 kilos., against 2,359,600 kilos. during the first half-year of 1887. The re-exports of cinchona from Germany were respectively 12,200 and 10,800 kilos. The exports of cinchona bark from private plantations in Java for the first four months of the year has been:—

	1886	1887	1888
To Holland .. Kilos.	162,544	153,933	382,551
„ England .. „	30,684	17,636	44,743
Kilos.	193,228	171,569	427,294



The following figures represent the cinchona trade of the United Kingdom during the last five years:—

Exported to		1883	1884	1885	1886	1887
Germany ..	.. cwt.	10,188	12,836	15,420	31,452	36,522
" ..	.. value £	82,686	66,904	75,134	154,632	129,998
Holland ..	.. cwt.	20,838	52,862	42,307	40,439	34,424
" ..	.. value £	153,884	358,153	197,371	188,415	126,478
Belgium ..	.. cwt.	9,649	4,994	10,223	2,530	3,414
" ..	.. value £	82,053	33,980	46,087	11,133	15,270
France.. ..	.. cwt.	10,580	12,659	12,803	13,830	10,944
" ..	.. value £	90,660	81,211	83,748	65,024	48,181
Italy .. ..	.. cwt.	7,719	8,936	1,583	9,614	12,125
" ..	.. value £	52,568	55,647	11,898	31,446	48,348
United States..	.. cwt.	7,798	10,163	23,720	19,669	33,494
" ..	.. value £	70,716	76,144	203,342	93,758	110,441
Other countries	.. cwt.	2,607	438	384	597	453
" ..	.. value £	17,227	4,293	3,931	3,376	2,923
Total exports	.. cwt.	69,379	102,978	112,440	117,991	131,379
" ..	.. value £	555,799	679,336	621,511	547,794	481,636

Imported from		1883	1884	1885	1886	1887
France ..	.. cwt.	11,973	5,384	1,881	3,996	1,863
" ..	.. value £	192,510	63,634	22,959	40,525	15,124
British India (Madras) cwt.		3,216	2,494	6,588	8,151	10,783
" ..	.. value £	47,738	26,697	55,245	57,615	55,742
Ceylon ..	.. cwt.	47,860	78,055	106,375	114,932	105,282
" ..	.. value £	474,699	579,014	655,646	564,802	431,379
U.S. Colombia ..	.. cwt.	29,195	6,456	2,192	4,975	636
" ..	.. value £	391,857	65,319	28,055	53,932	5,531
Ecuador ..	.. cwt.	9,399	3,519	2,120	621	344
" ..	.. value £	120,818	55,861	32,729	9,613	4,529
Peru .. ..	.. cwt.	2,508	1,950	2,557	1,537	2,660
" ..	.. value £	40,772	28,301	28,253	12,848	33,835
Chili .. ..	.. cwt.	2,803	2,013	928	1,891	3,053
" ..	.. value £	44,713	23,849	9,693	12,966	20,401
Other countries	.. cwt.	9,919	5,920	5,463	9,265	18,506
" ..	.. value £	110,409	57,794	41,742	49,002	94,641
Total imports	.. cwt.	116,921	165,791	128,114	145,357	143,177
" ..	.. value £	1,423,516	906,499	874,332	801,353	661,182

COPPER (SULPHATE) quiet but steady at 20*l.* for first mint.

CREAM OF TARTAR is a trifle better, first white at 115*s.* to 116*s.*, and seconds at 113*s.* per cwt. Although the scarcity is not now very pressing, yet there is by no means an abundance of fine firsts.

CUTCH.—The latest sales reported include the following brands, all London terms: *Star B.* 31*s.*; *MM.* 30*s.* 6*d.*; *Cock*, 29*s.*; *Eagle*, 28*s.*; and *SKG*, 27*s.* per cwt.

GALLS.—Business is reported to have taken place in fair quality *China* galls at 58*s.* per cwt. London terms, an advance of 1*s.* to 1*s.* 6*d.* per cwt.

GAMBIER.—Block has been arriving more plentifully, but there is still a pretty large business doing at the following prices: Spot, 26*s.* to 26*s.* 6*d.*; near at hand, 25*s.* to 25*s.* 3*d.*; August-September shipment, 23*s.* 4½*d.*; and July, 24*s.* 9*d.* to 25*s.* per cwt. *Cubes*, good free, have sold at 34*s.* 6*d.*

GLYCERINE has now advanced to 65*l.* per ton for double-distilled, s.g. 1.260; and some agents say that they contemplate a rise of another 20*s.* per ton this week.

GUM ANIMI.—There was a rather small assortment catalogued for to-day, and, although little animation was shown, steady prices were realised, especially for *Malagasear* gum, of which 22 packages sold at 9*l.* 2*s.* 6*d.* to 8*l.* 12*s.* 6*d.* for medium to good pale amber glassy sorts, 7*l.* 5*s.* to 7*l.* 2*s.* 6*d.* for fair to small pale sorts, 6*l.* 10*s.* to 5*l.* 10*s.* for small amber to ordinary red sorts, and 62*s.* 6*d.* down to 32*s.* 6*d.* for pickings. *Demerara* animi sold at 79*s.* to 84*s.* for unwashed red, and 35*s.* for common coated. Good amberry *Bombay* sorts brought 7*l.* 17*s.* 6*d.* to 8*l.*; and *Zanzibar* moved off at 12*l.* 5*s.* for mixed amber sorts, and 36*s.* to 34*s.* per cwt. for pickings.

GUM ARABIC.—Previous to the weekly auctions a better inquiry was reported for *Ghatti* gum, and nearly 300 cases were reported as having changed hands at full rates. This feeling was fully maintained at to-day's auctions, when,

although the general demand for arabics (which were plentifully offering) was slack, a good competition prevailed for *Ghatti* of medium quality, which sold at fully 2*s.* per cwt. advance, very fine pale at 120*s.* to 125*s.*, fine bright at 65*s.* 6*d.* to 70*s.*, fair partly dark to good palish at 45*s.* to 57*s.* 6*d.*, pickings at 15*s.* to 33*s.*, and siftings at 15*s.* to 18*s.* per cwt. *Australian* gum was in good supply, 134 packages being offered. These mostly sold at a fresh decline, only 66*s.* being realised for very good bold pale red frosted gum, while good to fair darkish red brought 49*s.* to 45*s.*, and common dark and woody, 42*s.* to 40*s.* 6*d.* per cwt. *Cape* gum realised 30*s.* for common brown block, and *Brown Barbary* 25*s.* to 53*s.* for dark woody to fair. *East Indian Amrad* sold as follows:—Fine bold amber to pale soft frosted, 6*l.* to 6*l.* 17*s.* 6*d.*; common red to fair amber drop, 38*s.* to 53*s.*; good to fine soft pale siftings, 43*s.* 6*d.* to 61*s.*; and dark red ditto, 34*s.* to 36*s.* per cwt. *Gehirah* gum is out of stock at present, and no fresh supplies are looked for until towards the close of the year.

GUM KOWRIE.—At to-day's auctions 1,637 cases were offered, but the demand was a very small one, and only a few lots sold at unchanged rates, fair picked amber at 68*s.* to 70*s.*; fairly good bold pale, three-quarters-scraped sorts, 50*s.* rough to fair, hard, partly-scraped sorts, 40*s.* to 46*s.*; dark to fair chips, 29*s.* to 40*s.*; common pickings, 29*s.* 6*d.* to 30*s.*; fair dust, 20*s.* per cwt.

GUM OLIBANUM quiet. Lower prices were accepted for the common varieties. Fair medium tears sold at 32*s.* 6*d.*; common woody to good pickings at 9*s.* 6*d.* to 16*s.*; ordinary to fair siftings, 10*s.* to 12*s.* per cwt.

GUM SANDARAC.—At to-day's auctions 44 packages were sold without reserve; common specky to fair, but very dusty, at 45*s.* to 56*s.* per cwt.

HERBS AND FLOWERS.—Our reports are to the effect that, while most of the German vegetable drugs will yield but an indifferent crop as regards quality, *German chamomiles* have been exceptionally favoured by the changeable temperature. *Flor. egypt.*, *sambuci*, *tilia*, and *juglandis*, *herbe*, *belladonna* and *digitalis* are all said to be of good quality, but *flor. lami* and *rosar. rubr.* are scarce, and the price of the former has again advanced. *Herba veronica* is also arriving sparingly. In France *herba centaurei* has been scarce, and Algeria, which furnishes the finest quality, has yielded very little this year. *Red roses*, *violets*, and *coltsfoot* are all dear this year. *Marshmallow* has not yet arrived on the market. In Belgium *Valerian* has yielded a crop quite as good as last year.

INSECT FLOWERS.—The latest Trieste quotations are, for open flowers, 198*s.*; half open, 218*s.*; and closed flowers, 228*s.* per cwt. c.i.f. London. Powder is quoted at 1*s.* 7½*d.* per lb., an advance of 1½*d.* per lb. since our last report. Holders in Dalmatia are said to be very firmly disposed, and do not care to quote any prices at all.

IODINE.—Crude remains steady at 9*d.* per oz.; *Resublimed* at 13*s.* 6*d.* per lb., and *Iodide of Potassium* at 11*s.* per lb.

LEAD (ACETATE) quiet, with a little business at 26*s.* 6*d.* per cwt. for white foreign, and 28*s.* for English. Brown is worth 20*s.* 6*d.* per cwt.

MAGNESIA quiet at 40*s.* to 45*s.* per cwt. for *Carbonate*, and 1*s.* 2*d.* to 1*s.* 4*d.* per lb. for calcined.

MERCURIALS remain unchanged at 3*s.* 1*d.* for *Calomel*; 3*s.* 3*d.* for *White*; and 3*s.* 4*d.* for *Red Precipitate*; 1*s.* 11*d.* for *Mercurial ointment*; 1*s.* 11*d.* for *Blue pill*; 2*s.* 5*d.* for *Corrosive sublimate*; and 2*s.* 5*d.* to 2*s.* 6*d.* for (English) *Vermilion*.

MORPHIA.—The manufacturers still keep their price for powder at 4*s.* per oz., and are firm at that figure.

OIL (ALMOND).—English expressed oil is quoted at 1*s.* 3*d.*

OILS (ESSENTIAL).—*Star anise* very quiet. We hear that offers have been wired out to China on the basis of 5*s.* 10*d.* per lb. c.i.f. for direct shipment to the Continent, but that holders in China ask 6*s.* c.i.f.; spot is quoted 6*s.* 4*d.* to 6*s.* 5*d.* per lb.; oil of *almonds* is held at 25*s.* per lb. *Cassia* very dull at 2*s.* 10*d.* to 2*s.* 11*d.* per lb. *Clove* oil dearer with a tendency to further advance; for English drawn 4*s.* 3*d.* per lb. is quoted. *Citronella* unchanged at the last quotations. *Lemon grass* neglected at 1½*d.* to 1½*d.* per oz. The



each crop of *Lavender* will be a very good one indeed. With regard to the Mitcham essential oil crop, a well-informed correspondent writes:—The seasons of 1887 and 1888 will doubtless be for a long time remembered by the growers in the Mitcham district as a season of contrast, the former for many weeks of tropical sun and want of rain, and 1888 its deluging rains and want of sun during the greater portion of the summer months. In consequence of the rather the crop outlook three or four weeks ago was about serious as it well could be from the grower's point; but the bright warm sun of the last two weeks has wrought a favourable change, and now there is some reason to look for a good yield. *Peppermint*, notwithstanding its having suffered in parts from blight or "snuff," as it is locally termed, will be a very good crop, the leaf being large and the plant very fine and heavy, so much so that it would be more easily cut than reaped, as is usual; the cutting of this plant has already commenced. *Lavender* will also be an abundant crop. The flower, thin and poor as it was three weeks ago, has grown under the warm sun at a tremendous pace, and is now considerably finer and larger than it was this time last year. *Uromomile* will also be a larger crop this season than last, as there is a slightly larger area under cultivation, but it will not be a very extensively cultivated plant owing to the rather difficult sale of the oil, for which the flower is almost always used in the Mitcham district. *American peppermint* rather weaker and dull at 12s. per lb. for HGH nominally.

**OPIMUM.**—On the spot the trade is confined within retail lots, some business in *Karahissar*, 1886 crop, at 9s. per lb., and a few inquiries for *Soft shipping* opium being all that is reported. The Smyrna market is somewhat easier. On August 3 the arrivals of new opium at Smyrna were 1,350 cases, against 187 and 1,036 on the corresponding dates of 1887 and 1886. At Constantinople 450 cases had arrived, against 100 the year before. The total arrivals at Constantinople and Smyrna, therefore, were 1,800 cases, equal to the whole of last year's crop. The bulling operations, in view of impending purchases by the Dutch Government, still continue. To these manoeuvres must also be attributed some reports which have again been circulated that the crop will after all reach over 7,000 cases, whereas the general opinion is that the minimum will be 10,000 cases.

**PHOSPHORUS** sells at 2s. for wedges, and 2s. 1d. for sticks; the amorphous is held at 3s. 1d. per lb.

**POPPY FLOWERS.**—This season's crop in Lincolnshire will be late one, and below the average in quantity. The late and continuous rains have broken down a great number of plants, and many more heads are spoiled by the high winds. Last year's crop was cleared out three months ago, and is growing higher as the season advanced. It is hardly to be hoped that the exceptional quality of last year's poppy will be again realised, even with the most favourable weather from this time forward. Growers are informed of the present scarcity, and higher prices are spoken of. The Persian poppy flowers are now arriving, and are being sold on the basis of 13s. per 1,000.

**POTASSIUM SALTS.**—*Bichromate* neglected at 4½d. per lb. *Chromate* has declined to 5d. to 5½d., and seems weak at that figure, although there has been some more business done. *Prussiate* may be bought at very low prices, below English at 6½d. and foreign at 6½d. to 6¾d. per lb.; red still held at 1s. 7d. per lb.

**POTASSIUM BROMIDE.**—No change has been made in the price, which still ranges at 1s. 5¾d. to 1s. 6½d. per lb. for quantities.

**SILVER.**—On Friday last the principal importers asked 7l. 15s. as their price, but secondhand holders still continued to sell at 7l. 10s., though since then they will not part with any under 7l. 12s., which is the current quotation. The stock in London at the commencement of this month is computed at 61,000 bottles, against 60,000 on August 1, 1887, when the price was from 8 to 9 per cent. lower.

**QUININE.**—So far as *German* quinine is concerned the situation remains virtually what it was last week. The German agents are sellers of bulk at 1s. 5d., but there are no buyers, and we hear of no transactions of any importance.

Meanwhile *Howard's* brand was reduced 2d. per oz. in price by the makers before the bark auctions on Tuesday. The following are the present official quotations:—*Howard's*—vials, 1s. 10d.; bulk, 1s. 8d. *Pelletier's*—vials, 1s. 10d.; bulk, 1s. 8d. *German*—bulk, 1s. 5d. per oz. Second-hand lots might be had at 1s. 4½d. or even 1s. 4d. per oz., but there is no inquiry.

**RHUBARB.**—We note further arrivals of 74 cases per s.s. *Titan* and *Nepaul* from Shanghai.

**SENEGA ROOT** keeps firm at 1s. 9d. per lb. for fine bright on the spot.

**SHELLAC.**—Nothing was offered for sale by auction this week, and privately business is confined to a few transactions in *Second orange* lac up to 44s. for TN standard on the spot, and 42s. c.i.f. terms for TN arrived. In India sellers still maintain that shellac is scarce, and too high in price to admit of being worked at the present shellac prices. The article closes with a better feeling, and fairly large spot sales of *Garnet* lac, AC, at 35s. to 35s. 6d. for good to fine free.

**SODA SALTS.**—*Asb* quiet, Tyne price 1d. per degree less 10 per cent. London, landed, 1½d. per degree, with some little business. *Bicarbonate* without alteration at 5l. 5s. ex warehouse, with a very moderate demand. *Caustic* is held at 6l. 15s. to 7l. for 60 to 70 per cent. white on the spot; cream fairly steady at 6l. 15s. In *Crystals* business here is rather quiet at 46s. 6d. per ton ex ship. The Tyne quotation is now 40s. 6d. to 40s. 9d. per ton, having slightly receded since last week. *Nitrate* firm at 9s. to 9s. 6d. on the spot, according to quality.

**SPICES.**—The market, one article only excepted, is very quiet, although until this week no auctions had been held since August 1. For *Arrowroot* there is very little inquiry, and the only sales made are about 200 barrels fair to good St. Vincent at 2½d. to 3d. per lb. Some fine St. Vincent arrowroot was shown, but bought in at 5½d. per lb. For good to fine Bermuda 1s. 4d. to 1s. 6½d. per lb. was paid. *Capsicums* sold at 22s. to 24s. 6d. per cwt. for medium to good small bright stalkless selected Madras. *Cassia lignea* quite neglected, with a continually increasing stock. A very good inquiry has prevailed for *Zanzibar Cloves*, and the prices realised at the auctions fully maintained the advance which has been privately obtained. Fair to good *Zanzibar* realised 6½d. to 6¾d.; good Amboina, 9¾d. per lb. *Zanzibar Clove stems* are selling at 1½d. to 1¾d. per lb. *Ginger* is offering very plentifully, especially the common grades, and for Cochin only lower rates are, with some difficulty, obtainable. Common brown rough sold, in auction, at 18s.; fair, partly cut, at 24s. to 25s.; fair to good small cut, 25s. 6d. to 30s. per cwt. About 180 barrels Jamaica ginger also found buyers at unaltered prices: 51s. to 70s. for common small to good medium washed, and 75s. to 100s. for fair to fine bold ditto. *Nace* steady but quiet, with small sales of ordinary to fine bright West India at 2s. 5d. to 3s. per lb. *Nutmegs* unchanged, the principal business at the auctions being in West India, which sold at the following rates: 68s to 77s, 3s. to 2s. 5d.; 94s to 124s, 2s. 3d. to 1s. 11d.; 164s to 1s. 6d. per lb. At the end of last and the commencement of the present week private business was reported in Singapore black pepper at reduced rates, viz.: 7½d. spot, 7½d. for near to 7¾d. at hand, and 7½d. for August–September. At the auctions the only parcel sold was 200 bags fair Atcheen–Penang (748 to 749 per cent. dust) at 6½d. per lb. *White Pepper* quiet, with sales of Singapore at 11½d. per lb. on the spot. *Pimento* full up, and held for high rates. Fair clean to good Jamaica has sold at 2½d. to 2¾d. per lb.

**SULPHUR** has been advanced in price from 5 to 10 per cent., now quoted 9s. 6d. to 10s. for English flowers.

**TEA.**—*China* market. A large amount of Congou has been thrown on the market this week, with a considerable quantity offered in public auction on Monday, Tuesday, and Thursday, and at last a fair assortment of Monings is to be had under 1s., some very useful teas selling from 8d. to 1s. Comparatively few, however, are quite free from tar, though some good leaf Ningchows are now coming in from the second crop. Merchants, however, are wanting firm prices for these sorts, and there has not been much business done. Common new Monings have sold as low as 4½d. to 4¾d., having dropped from 6d. within a few weeks. On the other hand there are but few



really serviceable Kaisows to be had between 8*d.* and 11*d.*, Soomoos being such a very poor crop. First crop Panyongs and Chingwos are showing very fair value, from 10½*d.* to 1*s.* 3½–3*d.* Also fine Pecco Congous selling about the latter prices, the finer grades being hence below opening rates. These finer sorts are, however, not likely to be cheaper. Capers are showing very fair value for olive sorts, from 6*d.* to 1*s.*, but black glazed sorts are at the moment scarcer and wanted. New Pingsuey gunpowders offered in sale on Wednesday sold slowly. *Assams* keep very steady for the lower grades, but Pekoes from 9*d.* to 1*s.* 1*d.* are coming forward in large quantities, and some very useful teas may now be bought. Pekoe Souchongs and Souchongs from 7½*d.* to 9*d.* are wanted, and firm. Fine old broken Pekoes are selling at heavy reductions, and show very fair value from 1*s.* to 1*s.* 3*d.* *Ceylons* are very firm, the chief demand running on lower sorts, and there is very little broken Ceylon to be had under 8*d.*; while very poor Souchongs, that would have realised 8*d.* to 8½*d.* a few weeks ago, are readily taken at 9*d.* There are, however, large quantities of Ceylon to come, and while we do not anticipate any heavy fall, we should not advise buying these grades except from hand to mouth.

### THE AMERICAN MARKETS.

NEW YORK, August 4.

THE past week has been a little more animated than for some time back, in consequence of quite a stir having taken place in the opium market, the article suddenly advancing some 10*c.* to 15*c.* per lb. Everything else is very quiet, and a fair active jobbing demand continues right along. The Mills Tariff Bill has passed the House, and now awaits the action of the Senate; there it may hang up for several months and be finally rejected, as the majority are not supposed to favour any reduction in import duties, they being mainly Republican, while the reduction of the tariff is entirely a Democratic measure, and originated with the House of Representatives, where the majority is of the latter class of politics, and any change in the tariff appears to be about as remote as ever.

ACID (CITRIC) remains about the same for either American or foreign, viz., 50*c.*, less duty, 10*c.* per lb. (1*s.* 8*d.*), with a fair and steady demand for consumption.

BALSAMS.—*Copaiba* remains steady under a fair jobbing demand; there has been more doing in large lots recently, and some 70 cases have come in lately of Central American, which brought about 45*c.* (1*s.* 10½*d.*), but for jobbing the price is 47*c.* to 50*c.* (1*s.* 11½*d.* to 2*s.* 1*d.*) for Central American; 52*c.* to 54*c.* (2*s.* 2*d.* to 2*s.* 3*d.*) for Pará and Maranh, and 60*c.* (2*s.* 6*d.*) for Angostura. Canada *Fir* is quoted \$2.60 for new crop (10*s.* 5*d.*), and Oregon \$1.10 (4*s.* 7*d.*). *Peru* has declined a little, and is selling at \$1.02½ (4*s.* 3½*d.*). *Tolu* is unchanged, 28*c.* to 30*c.* (1*s.* 2*d.* to 1*s.* 3*d.*), as to quantity and quality.

BROMIDE OF POTASSIUM still continues unchanged, 33*c.* in lots of 1,000 lbs. the manufacturer's best price.

CUBES are selling freely in a jobbing way, and the prices are firmly maintained, \$1.75 (7*s.* 3½*d.*) for prime sifted and stemless, and \$1.50 (6*s.* 3*d.*) for natural stemmy and unsifted. Pretty much all the cubes coming to this market now are small shrivelled berries, none of the bold dark large ones of former years, when the price was about 10*c.* per lb. (5*d.*).

LYCOPODIUM continues very steady at 38*c.* to 39*c.* (1*s.* 7*d.* to 1*s.* 7½*d.*), and while efforts have been made to raise the price to 40*c.* (1*s.* 8*d.*), they have failed, as the demand is not large enough as yet to sustain any very pronounced advance, the stocks being large here, and one or two eager sellers always keep the price down. The demand for this article is likely to be very large during the coming political campaign, when very much of it will no doubt be consumed, and prices in consequence advance very materially; but it is a little early yet, and holders get impatient, and with their desire to sell keep the price in the buyer's favour, as it is now said to be under cost of importation.

OILS (ESSENTIAL).—*Anise* is somewhat firmer, and held at \$1.62½ to \$1.65 (6*s.* 9½*d.* to 6*s.* 10½*d.*), with an advancing

tendency. *Peppermint* maintains its recent advance, and is very firm at \$3 to \$3.25 (12*s.* 6*d.* to 13*s.* 6*d.*) for GH in bottles, and \$2.35 (9*s.* 9*d.*) for prime New York State, and \$2.15 (9*s.*) for prime Western, with every prospect of the higher prices prevailing all through the year. *Sassafras* is scarce at the moment, and 48*c.* to 50*c.* (2*s.* to 2*s.* 1*d.*) is asked; stocks are light and holders are firm. *Pennyroyal* is also scarce, and held at \$1 per lb. *Wintergreen* is firmer and higher; \$1.90 (7*s.* 11*d.*) is the asking price, but this might be shaded some little, say 5*c.* per lb., or \$1.85.

OPIMUM.—There has been a considerable improvement in the market for this article within the past week. The upward movement has been attended by considerable buying, and sales are reported of some 75 cases, all pretty much, however, in small lots, to jobbers and consumers, at from \$2.75 to \$2.80, or \$1.75 to \$1.80, less duty 7*s.* 3½*d.* to 7*s.* 6*d.*, at which figures it is held very firm, with some holders even asking as high as \$2.85; these holders must have considerable confidence in the maintenance of the advance.

QUICKSILVER is easier here in sympathy with the late decline in the London market, and it is obtainable at 54*c.*, duty 10 per cent. (2*s.*).

QUININE continues steady and unchanged at recent prices, 34*c.* to 35*c.* as to brand (1*s.* 5*d.* to 1*s.* 5½*d.*).

ROOTS.—*Ipecacuanha* has advanced here in sympathy with the London market, and holders here have put up their prices to \$1.70 to \$1.75 (7*s.* 1*d.* to 7*s.* 3½*d.*), and the tendency is still higher. *Senega* has been in good demand, and Western is held at 32*c.* to 34*c.* (1*s.* 4*d.* to 1*s.* 5*d.*), and Southern, which is scarce, 38*c.* to 40*c.* (1*s.* 7*d.* to 1*s.* 8*d.*). *Golden Seal* is very low and only worth 24*c.* to 26*c.* (1*s.* to 1*s.* 1*d.*).

### CHEMICALS IN THE NORTH OF ENGLAND.

THE tone of the chemical market here generally is decidedly better, the home trade has improved, and foreign orders are coming in far more freely. We look for a decided advance in many articles before long. Foreign inquiries are partly caused by the greater firmness in freights, this firmness having its source in the long-continued wet weather, and consequent advance in wheat creating a demand for tonnage, and a probable rise in freights.

ACIDS.—*Tartarie* has only been moving off slowly, and is dull here at 1*s.* 6½*d.* per lb., while *Citric* is weaker, holders offering at 1*s.* 7*d.*. *Oralic* is firm at 3*d.* to 3½*d.*, and *Boracic* is held for higher prices, 26*s.* being required on spot, very little offering for forward delivery.

ALUM.—There has been a decided improvement in demand, and inquiries and shipments are increasing in weight and quantity. The market is very steady, at 4*l.* 15*s.* to 4*l.* 17*s.* 6*d.* per ton, according to packages. In *Sulphate of alumina* there has also been more movement at 5*l.* to 5*l.* 10*s.* per ton, whilst *Aluminoferrie cake* has been active at 3*l.* 2*s.* 6*d.* per ton.

AMMONIA SALTS.—*Sal ammoniac* has been in request for export, and is being freely shipped at 34*s.* for first, and at 32*s.* per cwt. for second quality. *Muriate* also meets with better inquiry, and present values are 23*l.* to 31*l.* per ton, according to crystals and colour. *Carbonate* is without change, but is steady at 3*d.* per lb. *Sulphate* is neglected and easier, the nearest closing values being for good grey, spot and Hull, at 11*l.* 7*s.* 6*d.* to 11*l.* 10*s.* per ton.

BORAX is steady and, with the advance in acid, is somewhat firmer, the closing prices being 30*s.* for crystals and 31*s.* for powdered. Californian is still very scarce, no arrivals having taken place, and the nearest value to-day is 30*l.* f.o.b.

BLEACHING POWDER has been in good demand, and continues to harden. The supply for prompt is limited, and stocks are being rapidly cleared off. The closing quotations are:—Soft on rails at 7*l.* 6*s.* 3*d.*, and hard f.o.b. at 7*l.* 10*s.* per ton.

SALTPETRE meets with a somewhat more active inquiry, and is steadily held at 21*s.* 6*d.*, barrels, and 22*s.* 6*d.*, kegs. Montreal pots have declined to 21*s.* 9*d.*, but several sales have been made for forward delivery under this.



## BOARD OF TRADE RETURNS.

IMPORTS		July, 1886	July, 1887	July, 1888
ugs, unenumerated ..	value £	46,226	54,817	62,635
chemical manufactures and products, unenumerated ..	"	125,300	139,869	100,918
chemicals and dyestuffs, unenumerated ..	"	163,410	157,294	185,526
Oils, not enumerated ..	"	109,988	89,632	76,535
Alkali .. .. .	.. cwt.	6,484	5,353	6,243
" .. .. .	.. value £	5,169	4,998	6,242
Brimstone .. .. .	.. cwt.	59,204	48,642	60,850
" .. .. .	.. value £	15,386	11,046	13,851
Nitrate of soda .. .. .	.. cwt.	137,718	78,480	112,020
" .. .. .	.. value £	60,352	32,500	49,049
" of potash .. .. .	.. cwt.	12,963	12,349	18,809
" .. .. .	.. value £	11,794	11,136	16,217
Quicksilver .. .. .	.. lbs.	334,317	356,525	22,125
" .. .. .	.. value £	30,420	30,801	2,156
Cinchona bark .. .. .	.. cwt.	12,071	10,492	14,072
" .. .. .	.. value £	64,374	39,763	41,747
Gum Arabic .. .. .	.. cwt.	2,783	4,112	6,853
" .. .. .	.. value £	10,826	19,269	21,588
Lac, seed, shell, stick, and dye ..	.. cwt.	5,112	10,162	8,157
" .. .. .	.. value £	14,359	26,551	19,391
Cinnamon .. .. .	.. lbs.	60,622	48,226	83,799
" .. .. .	.. value £	1,930	1,470	1,939
Ginger .. .. .	.. cwt.	4,168	4,564	7,706
" .. .. .	.. value £	7,790	9,679	11,970
Pepper .. .. .	.. lbs.	1,411,165	2,092,525	1,916,865
" .. .. .	.. value £	39,281	72,032	61,498
Bark (for tanners' or dyers' use) ..	.. cwt.	48,074	41,786	47,598
" .. .. .	.. value £	22,040	20,032	25,444
Aniline .. .. .	.. "	22,809	25,495	22,115
Alizarine .. .. .	.. "	14,872	18,786	20,602
Other coal-tar dyes .. .. .	.. "	—	1,103	562
Dochineal .. .. .	.. cwt.	678	393	152
" .. .. .	.. value £	4,324	2,606	917
Cutch and gambier .. .. .	.. tons	1,358	1,075	1,456
" .. .. .	.. value £	34,174	25,787	35,600
Indigo .. .. .	.. cwt.	2,472	2,166	1,975
" .. .. .	.. value £	32,542	37,072	31,687
Madder, madder root, &c. ..	.. cwt.	951	1,245	2,101
" .. .. .	.. value £	1,365	2,521	2,482
Cocoa-nut oil .. .. .	.. cwt.	4,307	730	2,713
" .. .. .	.. value £	6,378	1,118	2,962
Olive oil .. .. .	.. tons	1,511	1,631	586
" .. .. .	.. value £	55,885	57,088	22,301
Palm oil .. .. .	.. cwt.	110,685	82,404	75,397
" .. .. .	.. value £	114,507	77,979	72,778
Petroleum oil .. .. .	.. gals.	6,295,797	10,429,293	8,702,755
" .. .. .	.. value £	172,583	260,681	204,488
Various seed oils .. .. .	.. tons	1,851	747	714
" .. .. .	.. value £	40,810	18,179	17,854
Turpentine .. .. .	.. cwt.	61,442	65,819	71,243
" .. .. .	.. value £	78,208	83,422	94,484
EXPORTS				
British and Irish produce—				
Drugs and chemical preparations and medicines ..	.. value £	73,887	64,982	65,716
Sundry chemicals .. .. .	.. "	271,122	298,561	322,275
Painters' colours and materials ..	.. "	107,465	112,114	115,712
Alkali .. .. .	.. cwt.	446,899	460,001	458,590
" .. .. .	.. value £	124,176	137,070	119,578
Bleaching materials .. .. .	.. cwt.	105,309	102,278	116,639
" .. .. .	.. value £	32,837	38,776	45,366
Seed oil .. .. .	.. tons	4,223	4,546	5,353
" .. .. .	.. value £	92,952	98,788	108,387
Pickles, vinegar, sauces, condiments and confectionery ..	.. "	93,371	93,150	105,187
Soap .. .. .	.. cwt.	40,416	50,095	37,493
" .. .. .	.. value £	40,073	46,687	35,775
Foreign and Colonial merchandise—				
Chemicals, unenumerated ..		18,443	17,487	14,633
Cinchona bark .. .. .	.. cwt.	7,541	7,290	12,958
" .. .. .	.. value £	31,246	33,246	33,836
Dochineal .. .. .	.. cwt.	780	533	686
" .. .. .	.. value £	5,309	3,447	3,528
Cutch and gambier .. .. .	.. tons	896	901	407
" .. .. .	.. value £	23,830	23,398	11,711
Gum Arabic .. .. .	.. cwt.	4,620	3,552	4,912
" .. .. .	.. value £	15,176	14,624	19,958
Indigo .. .. .	.. cwt.	2,483	2,863	1,823
" .. .. .	.. value £	50,890	63,070	39,062
Lac, seed, shell, stick, and dye ..	.. cwt.	5,419	6,071	7,849
" .. .. .	.. value £	15,135	15,335	20,277
Cocoa-nut oil .. .. .	.. cwt.	5,318	8,457	9,921
" .. .. .	.. value £	7,185	12,060	11,793
Olive oil .. .. .	.. tons	232	309	324
" .. .. .	.. value £	9,938	12,142	13,210
Palm oil .. .. .	.. cwt.	76,180	27,703	59,836
" .. .. .	.. value £	78,171	27,116	57,388
Petroleum oil .. .. .	.. gals.	28,040	25,430	35,847
" .. .. .	.. value £	1,352	1,351	1,675
Quicksilver .. .. .	.. lbs.	327,687	618,294	243,485
" .. .. .	.. value £	23,658	54,837	24,295
Cinnamon .. .. .	.. lbs.	86,795	108,000	80,888
" .. .. .	.. value £	2,716	3,971	2,816
Pepper .. .. .	.. lbs.	1,477,923	1,554,500	1,451,736
" .. .. .	.. value £	46,386	45,665	47,477

## TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds for objection to the registration of any of the following marks may, within two months of the date of this journal, give notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." The address of the Patent Office is Southampton Buildings, London, W.C.

From the "*Trade Marks Journal*," August 15.

"BRANSON'S SPADE MILK COFFEE, SWEETENED," in fancy design; for milk-coffee. By Branson & Co., Chase Works, The Chase, Clapham, London, S.W. 69,929.

"STRAWSON & Co., NEWBURY, QUADRÂ ROTUNDUM," on diagram of square in circle, with signature; for chemical substances for agricultural and other purposes. By T. F. Strawson (trading as Strawson & Co.), Newbury, Berkshire. 70,157.

"WEDGWOOD," and drawing of teapot; for an ointment. By M. A. Wedgwood, The Bell, Bovingdon, Hemel Hempstead, Herts. 72,269.

"FRITZ'S SALT REGAL," and other wording, on fancy label; for a medicinal preparation. By R. C. Scott (trading as Fritz & Co.), 36 Fleet Street, Liverpool. 73,409.

"SAL REAL"; for a medicinal preparation. By R. C. Scott, as above. 73,764.

"LOEFLUND'S KINDERMILCH INFANTS' FOOD"; for the same. By Loefflund & Co., 148½ Fenchurch Street, London, E.C. 74,010.

"SWITCHBACK," and other wording; for an aerated drink. By D. Booth, Town Hall Tavern, Town Hall Square, Bolton. 74,481.

"ASHLEY'S MONK BRAND SOAP," and other wording, and picture of a monk with face reflected on polished pan; for a cleansing soap. By E. A. Ashley, 7 Woodbine Road, Gosforth, Newcastle-on-Tyne (trading as E. Ashley & Co., Newcastle-on-Tyne and London). 74,791.

"BRITISH HYGIENIC SOCIETY'S ALMOND POPOLINE SOAP"; for a perfumed soap. By M. Leon (trading also as British Hygienic Society), Warwick House, Christchurch Road, Brondesbury, N.W. 75,084.

"BOVÉ"; for a food. By J. L. Johnston, Oriol House, 30 Farringdon Street, London, E.C. 75,218.

Fancy drawing of a stork, with letters "R. E. B. & Co."; for carbolic fluid. By R. E. Bickerdike & Co., 1 East India Avenue, Leadenhall Street, London, E.C. 75,253.

"FOURPENNY BRAND SWISS MILK," and drawing of four pennies and other wording on label; for Swiss condensed milk. By H. F. Schnitzer, trading as Schnitzer & Co., 7 Upper Thames Street, London. 75,259.

"JULIAN," with two feathers in double circle; for mineral water. By T. Julian, High Street, Market Weighton, Yorks. 75,404.

Monogram of "J. A. P." in fancy circle; for complexion powders. By The J. A. Pozzoni Medicated Complexion Powder Company, 1122 Pine Street, Saint Louis, Missouri, U.S.A. 75,631.

"RIDGE'S FOOD COCOA"; for cocoa. By P. J. Rumney, trading as Ridge & Co., Glenalmond, East Molesey. 75,848.

"GLYCOPINE," with figure and other wording, on label; for a preparation for the feet and armpits. By E. H. Buckell, trading as F. W. Hunt, North Street, Chichester, Sussex. 75,871.

"SOLVO," on monogram; for a laundry soap. By The Solvo Laundry Supply Company (Limited), 6 Adelaide Street, Strand, London. 76,014.

Picture of man killing a lion; for substances for food. By J. L. Johnston, Oriol House, 30 Farringdon Street, London, E.C. 76,550.





### Memoranda for Correspondents.

*Always send your proper name and address; we do not publish them unless you wish.*

*Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.*

*If you send us newspapers, please mark what you wish us to read.*

*Ask us anything of pharmaceutical interest: we shall do our best to reply.*

*Before writing for formulae consult the last volume, if you have it.*

*Letters, queries, &c., not noticed in this issue will, if possible, be attended to next week.*

### Foreigners in the Preliminary Examination.

SIR,—My letter of August 4 seems to have sensibly touched the London correspondent of the *Pharmaceutische Zeitung*, and of course no one can blame him for trying to defend the recently so easily gained advantages obtained by some of his countrymen in England.

The points which this gentleman, however, brings forward in answer to my letter require further consideration and comment in the interest of English pharmacists in the first place, and in defence of my own action in bringing this dangerous practice of the Council before the public in the second—as some of your readers may have received the impression from some expressions employed (quite out of place) by my German adversary that my letter of August 4 really is an immature production. I beg to submit the following statements in furtherance of my views on this all-important subject:—

1. That if the Teuton race have up to this time satisfied themselves by acquiring only German businesses in England, their principal reason for so doing is that the desire of most of these gentlemen has been cooled down by the difficulties of the Preliminary examination. German pharmacy, as a lucrative profession, is at present in such a deplorable condition that numerous chemists who have passed their examinations have to serve for lengthened periods in the shops of their more fortunate fellows, until fickle fortune places the winning number in the renowned Hamburg Lottery at their disposal.

2. The English Preliminary examination does not require more from a German, nor so much “harking back to juvenile days” as quite new subjects, at least new to him, namely—a thorough knowledge of English grammar, weights and measures, and of the manner of employing such in English methods. This, I assert, is not included in any foreign certificate. There are not wanting proofs of many of our countrymen, who have devoted long years to the study and practice of chemistry, and who have found it necessary to “hark back to their juvenile days and get up a precise acquaintance with subjects which are laid before the expanding intellect of youth.”

3. The certificate of a “Realschule” is inferior to that of a “Gymnasium.” English is taught in both—equally insufficiently for an English examination.

4. As to the quotation from the *Pharmaceutische Zeitung*, “Amongst these men [namely, the English chemists] we find the most profound ignorance, &c.,” the remarks thereto of the London correspondent of that paper are calculated to mislead those who have not seen that article; and whether it is the opinion of that paper or not, it is certainly a leader, occupying nearly five columns; and from that circumstance alone one would naturally conclude the paper to have adopted the sentiments and tone in which it is written, which bristles with unjustifiable attacks on the qualifications of the English chemists. This is more surprising, as we find foreign students begging to be exempted from the Preliminary examination, to which all English students have to submit and pass.

5. If the objectionable habit of admitting foreigners to the final examinations without having passed the Preliminary

has been passed before without notice, then I presume the Council have been misled by erroneous statements, such as was made to Mr. Evans at the Council meeting in the discussion of the case Hebler (*vide* THE CHEMIST AND DRUGGIST, July 9, page 745), namely, that in Germany eases had been known in which foreigners have been exempted from the Preliminary; but this is no reason why we should not now make a firm and energetic protest against the continuance of innovations hitherto unknown under the new regulations.

The question resolves itself into this: Are the Preliminary examinations absolutely necessary? If so, why exempt foreign students? If not, why enforce them on Englishmen?  
Q. E. D.

SIR,—I have read with much interest the letters of “Q. E. D.” and the “London Correspondent of the *Zeitung*,” also your able leader thereon.

I think the remarks of “Q. E. D.” are very forcible, and evidently he knows what he is about. His argument is stronger inasmuch as his opponent admits that numerous applications are constantly reaching him from his countrymen.

The competition (without Germans) is already quite keen enough with the stores; and they were pool-poo’d at their first onset: but who laughs at them now?

I cannot help expressing my surprise that the Council should not more carefully defend the interests of the trade.

Yours truly,

August 14. PHARMACEUTICAL CHEMIST. (62/112.)

### What is “Magendie’s Solution of Morphia”?

SIR,—On page 80 of your journal for July 21, column first, commencing at line 29, you criticise our new “National Formulary” for speaking of a solution of the sulphate as that of Magendie, which you state should only be applied to one made from the citrate of morphia.

All over the United States the designation of “Magendie’s Solution,” so far as I have ever heard, is applied to one containing 16 grains of the alkaloid to the fluid ounce of 480 minims, whether the acetate, muriate, or sulphate be used, some physicians preferring one, some the other; but I never knew the citrate to be in common use anywhere.

A solution of this strength was always used here for hypodermic purposes, until, of late, the compressed tablets are most in vogue, being permanent and uniform.

The name “Magendie” is used to prevent confusion with the “Sol. morphiæ sulph. U.S.P.,” which is 1 grain per fluid ounce—only  $\frac{1}{16}$ th strength of the former; an error would involve serious results.

I notice Pereira, “*Mat. Medica*,” Phila. 1866, p. 841, says the Magendie is made from the acetate; so I doubt if the particular form of the alkaloid is essential.

BAC. SC., M. DR.,

Brooklyn, August 3.

Univ. Neo. Eboracensis.

[We discussed the subject at length in this journal August 4, page 156, giving a conclusion corresponding to that of the above writer.]

### Afternoon Closing.

SIR,—Notwithstanding the many and varied efforts which have been made and failed in securing for the chemist and druggist a weekly break in his monotonous and wearying duties, I would venture with your assistance to make a suggestion, which, so far as I am aware, has not yet been made. The relief has generally been striven after by efforts to close the shops for the evening of some particular day of the week. Now, until you can make the taking of medicine a source of pleasure rather than disgust and nausea, just so long will the general public put off the procuring of it till the very latest moment, and the chemist and druggist’s evening will continue to be the busiest time of the daily serving. Therefore, I hold efforts for evening closing to be wrong in their very nature, until, at least, something more like a millennium has dawned upon us. A patient or a customer has urgent need for some medicine to allay pain, we will suppose, in some place where evening closing has, after some trouble and many misgivings, been decided on. He goes to Mr. A to procure his means of relief. Mr. A hesi-



and objects, but at last consents to give it. Even though he is hesitating Mr. B passes for his evening stroll, and finding that the customer gains access has the first crack in his determination to keep closed—"That A said he would keep closed, and now he is serving after closing time. I am the secretary too!"

My suggestion is that an afternoon closing would be less objectionable in every way. Four hours, from one to five o'clock, would give time for a railway ride of ten or fifteen miles into the country, and a pleasant walk by brook, or river; time in which to make a business visit to the bank; two or three hours to spend in a museum or exhibition, to make a call and have an early cup of tea with a friend or relation. If an emergency arose calling for need of medicine there would not be the dread of what might happen during long hours from eight till seven or eight next morning, and Mr. A's humanity would not be likely to cause Mr. B's objections and objections.

In this plan I have adopted for the space of twenty years or more, both in this place and at Westminster. Simply closing up the door shutter, with a notice, "Closed until 5, 1888," is not followed by such an enormous loss as to make me dread a coming bankruptcy. I do not think the loss is worth a sixpence a time. I do it, and, therefore, I can from experience commend it to fellow-chemists anywhere in London as being much better than a snooze after dinner in a back parlour, which I know some indulge in. If a person adds the loss of sixpence or a shilling, all I can say is he is come to gain and keep it. I think a stroll in Epping Forest from here, or, as I used to have, a walk in Kew Gardens, for an hour or two in the Royal Academy or Kensington, or the Natural History or British Museum, worth far more than two sixpences or even shillings. Therefore, I would like all to enjoy a Wednesday or Thursday half-day holiday. I say you, brethren—can't we have it?

13 High Street, Stratford, GEORGE EDWARD BURT.  
August 14.

#### Is a Forward Move Possible?

SIR,—The suggestions and questions contained in the few lines from "Heder" under the above heading in last week's issue have been made over and over again in different ways, by different persons; but nothing practical has hitherto been the result. The main difficulty seems to be not so much what ought to be done as how to do it. It is pretty evident that, in order to get an amendment of the Pharmacy Act or a substantial addition to the schedule of poisons, the initiative must come from the Pharmaceutical Society; and, when we come to consider that three-fourths of the trade are outside the Society, we can at once see the chief difficulty, viz., how are these outsiders to be brought within the fold, in order that the Society may, by the irresistible power of its members, be compelled to move in this all-important matter? Rightly or wrongly, the blame for much of the present difficulty is laid at the door of the Pharmaceutical Society, and if the Society would bestir itself, as it ought to, and make amends for its former shortcomings and take energetic action in the interests of the trade, outsiders would enrol themselves under its banner. If the Pharmaceutical Society cannot see its way to carry out the manifest wishes of the trade, the only alternative is for the present outsiders to join the Society *en bloc*, and by their votes return one who will do so.

Yours truly,  
Manchester, August 14. THOMAS C. E. OSBORNE.

#### "Pharmacy Reform."

SIR,—I have for some time noted the various expressions of opinion concerning the difficulties and grievances of registered chemists and druggists, and have read about many different remedies for their removal. I think there is one of a practical nature which might be beneficial. Let every registered chemist join the Pharmaceutical Society, make himself a voter, and elect as members of Council men who would pledge themselves to study trade interests, and propose an Act of Parliament to "render it penal for any person except a registered chemist and druggist to vend any drug or medicine or *patent medicines* whatsoever." This would appear a very sweeping measure, but the public would be the benefit. They would receive their medicines from

skilful hands; and many places now without a chemist's shop could possess that necessary institution, for with the abolition of the unlicensed seller of medicines you would have created a *bona-fide* chemist who could exist easily. For twenty-five years chemists have been my constant and esteemed friends, for as a drug traveller for first-class houses I have, on the front of the counter, watched their difficulties increasing, and look back on my apprentice days when we sold scarcely any patent medicines at all, but had proprietary articles of our own for nearly everything. I would suggest to my brethren to join the Pharmaceutical Society, and then have a meeting in each town or district, and frame a resolution and send it to the member of Parliament for each city or county. It might take a little time, but I am firmly convinced that if a united effort were made such a Bill as I have described would pass the Houses of Parliament, because it would be based on common sense and justice. If Parliament has forced us to go through examinations for the protection of the public, Parliament should protect us in the exercise of our professional duties.

I am, sir, yours respectfully,

"VIATOR."

#### DISPENSING NOTES.

*The opinions of practical readers are invited on subjects discussed under this heading.*

*Dispensers who have compounded any of the following prescriptions, or similar ones, are requested to communicate their results to the Editor.*

49/111. *C. E. L.*—The prescription does not present any difficulty. If you dissolve 2 grains of codeia in 1 fl. oz. of distilled water, with 3 minims of acid. phosph. dil., and then use 2½ fl. drachms of the solution, you will have exactly ½ grain of codeia, and as nearly as possible 1 minim of the acid.

#### A Dispensing Explosion.

SIR,—An incident which happened the other morning may interest your readers, some of whom may be able to give an explanation of the cause, which is as yet unknown to me. While preparing a lotion (which I have done several times before with impunity) a violent explosion resulted, which left the mortar (a glass one) lying on the counter and floor in fragments, resembling gum arabic or bruised camphor, a sample of which please find enclosed to show the extent of the fracture. The lotion was zinci oxid., 5j.; glycerini, 3iv.; aq. ad 5ij. I had rubbed the oxide with the glycerine to bring it to a paste for a few seconds, and on adding about 5ij. of the water I was startled with the loud report, and the mortar (and contents, which remained afterwards apparently unaltered) scattering in all directions, and nearly spoiled a suit of clothes. Fortunately no serious damage was done further than the loss of the mortar and its contents, and that the junior apprentice, who had only been in the shop about a week, and who was standing close by, thought the whole shop was up. I renewed the process in a porcelain mortar, reversing the order of adding the liquids, and nothing happened. Zinci ox. was of a new stock procured from a house in town, but glycerine was of same as when last prepared.

Hoping to have some enlightenment as to its cause,

Yours faithfully,

SENIOR APPRENTICE, WERDNER. (72/111.)

[We should attribute the explosion to a molecular disturbance of the glass of the mortar. Such vessels, if imperfectly annealed, are liable to these explosions if scratched on the particular spot where the imperfection occurs. Probably a small piece of grit was rubbed over the point when the explosion took place.]

47/112. *A. E. J.*—We can hardly think the prescription is an Italian one judging from the tracings of the words you send us. The first line which you write, "inf. hublon," we should suppose would be "inf. houblon" (an infusion of hops ½ oz. to 16 oz.); but the term is French, not Italian.



The "pomade" (the Italian word would be "pomata") it is impossible to make out from your tracing only. It may be pomade hyd. precipit., the red oxide being intended, we judge from your statement. But if you know what it is for, you can better judge. This would be made with 1 to 15 of vaseline or lard. Sometimes a little laudanum is added.

72/112. *R. D. M.*—The prescription of which you send a copy appears to be a French one, and should be read as follows:—

Cremor tartar	..	..	..	..	155 grs.
Sacch. alb.	..	..	..	..	1 oz. and 30 grs.
Aq. font.	..	..	..	..	30 oz.

The marks in the margin mean "for a drink" and 1s. 3d., the price charged. Your copy of the directions is not very clear, but we read them to order some sort of glassful to be taken five or six times a day.

SIR,—I would like to know if it is usual among dispensing chemists to use lac bismuthi 1 in 4 instead of bismuthi subnit. when the latter is ordered in a prescription, as is done by a large firm of London chemists, or is it restricted to the few? The two preparations produce a mixture of very different appearance. The lac is easily shaken up and more diffusible.

Yours truly,

PELICAN. (18/113.)

[We should regard the use of lac bismuthi when bismuthi subnit. is ordered as quite indefensible.]

16/113. *Caryoph* writes:—In the following prescription, I find the spt. amm. arom. precipitates the ferri phosph. of the Easton's syrup, which I may state has been made by the B. P. C. formula. A few days ago the same prescription was dispensed with syrup made from the liquor obtained from a wholesale house, but no such precipitation was observed. Can you assign a reason for this?

Spt. ammon. arom.	..	..	..	..	5ij.
Syr. Easton	..	..	..	..	3ss.
Tinct. nucis vom.	..	..	..	..	5iss.
Aq. ad	..	..	..	..	3vj.

M.

[The explanation, we suppose, would be that the second-named syrup contained sufficient free acid to prevent the precipitation of the ferri phosph.]

#### LEGAL QUERIES.

*Ignoramus.*—There is no fixed scale for allowances to witnesses at police courts. A chemist should ask the magistrate before he is sworn to order payment of his expenses. A witness is not bound to attend on a subpoena unless a reasonable amount is paid to him with such subpoena; but once in court he cannot refuse to give evidence on the ground that his expenses have not been paid.

41/112. *Grateful.*—Bay rum is not liable to medicine-stamp duty if sold only as a toilet article; but it becomes liable if recommended on the label or by circular as a remedy for rheumatism or other complaints.

34/110. *P. A. D.*—You can obtain application forms for the registration of trade-marks from any post-office. These are not generally kept in stock except at the largest offices, but will be obtained. You will have to pay 5s. for the application form, and, having filled it in, you must forward it to the Trade-Marks Office. If accepted, you will have to pay 20s. for registration.

68/110. *A. J. D.*—See the previous answer. If some one applies to register a mark which you have yourselves previously used, you can on that ground enter an opposition, and you will most likely succeed in preventing the registration. But there is no means of making this opposition formally, except on the officially stamped document, which

will cost you 1l., and perhaps more if your rival contests the case. You can, of course, first write to him, and come to an arrangement, if you think fit and if he is willing. The opposition forms are to be obtained at the post-offices, like the other forms.

15/112. *S. H.*—The Medical Acts of the United Kingdom are not in force in the Channel Islands, but no doubt each island has its own regulations in regard to medical practice.

46/113. *Amicus*—You may not use methylated spirit for any medicine either for internal or external application, except for the official liniments specially named (aconite, belladonna, soap, and camphor), unless you get the express permission of the Board of Inland Revenue.

31/113. *Tom* says:—"A man enters a chemist's shop and purchases a patent medicine, stamped, labelled, and seemingly perfect. In a while he takes it back, and says it is not good. He has, of course, broken the stamp and rendered it unsaleable. Can he legally reclaim his money from the seller?"

[Certainly he can, if he is able to satisfactorily prove that he has received an improper article.]

15/107. *Shilling* writes:—"I am about to introduce a new remedy which I intend to sell at 1s.; but instead of using the word 'shilling,' I would like to introduce on my labels and wrappers an engraving of a shilling. Having some doubt whether such an act would be permitted, I wrote to the Board of Inland Revenue asking the question, and for reply was told 'that the question does not concern that department,' and that I might get a reply by writing to the authorities of the Royal Mint. I did so, and had a reply acknowledging receipt of letter, and adding:—"It is not within the province of the master of the Mint to express an opinion on the subject."

[We should think it quite probable that the Crown might have the power of preventing the copying of its designs, but we should think it enormously improbable that it would ever exercise such a power. If it did in your case, the fortune of your patent medicine would be made. We believe representations of a shilling have been stamped on books to indicate the price, and this week's *Trade Marks Journal* gives a mark in which four pennies are represented.]

#### MISCELLANEOUS INQUIRIES.

*A large number of correspondents ask us for formulæ which have already been published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.*

Correspondents who expect early attention to their queries must please observe the stipulation at the head of this section about using a separate sheet of paper for each query.

#### Books.

43/111. *R. J. H. R.*—The treatise on the "Art of Dispensing," to be published immediately by us, will contain the best collection of terms used in Continental prescriptions.

2/109. *Inquirer.*—The above work will best meet your requirements.

20/275. *A. C.*—Milne's "Principles and Practice of Midwifery and Diseases of Women" (Baillière, 12s. 6d.); Clay's "Handbook to Obstetric Surgery" (Churchill, 6s. 6d.); Barnes's "Lectures on Obstetric Operations" (Churchill, 18s.); Schroeder and Carter's "Manual of Midwifery"



Churchill, 7s.); Smith's "Handbook for Midwives" (Longmans, 5s.).

28/110. *Constantin*.—Weeden Cooke's "Cancer: its Allies and Counterfeits" (Longmans, 12s. 6d.); Purcell's "Cancer: Allies and other Tumours" (Churchill, 10s. 6d.); Marsden's "Certain Forms of Cancer" (Churchill, 8s. 6d.); Cancer Wells on "Ovarian and Uterine Tumours" (Churchill). See also answer to "A. C." The last you ask for will, perhaps, be best met by Swayne's "Obstetric Aphorisms" (Churchill, 3s. 6d.).

58/107. *Alizarine*.—Napier's "Manual of the Art of Dyeing and Dyeing Receipts" (C. Griffin & Co., 21s.). There is a very good treatise on "Dyeing and Dye-stuffs" generally in one of the parts of Spence's Encyclopædia, but it is more expressly applied to cotton-dyeing and calico-dyeing than to wool-dyeing.

10/109. *Sam Slick*.—Bugs can be got rid of if vigorous measures are taken. Small puffs of insect powder are of little use, and no healthy bug is afraid of sulphur. When they are only stray visitors insect powder supplied abundantly (by hand-fuls) will succeed; but if they are in millions the skirting boards must be removed, the walls scraped, the whole scrubbed with soda and water; then a solution of corrosive sublimate applied wherever there is the slightest chance of one existing, and afterwards turpentine and camphor administered. Careful watch must be kept for occasional survivors, and ultimately more soda and water and then paint and whitewash must be applied.

50/111. *J. A. T.*, who asks for a solvent for amber for varnish, is referred to the answer to "Digitaline."

58/111. *Pompeii*.—"Alcool de Concombre."—This is not an official preparation, but it would most likely be prepared by expressing the juice from ripe cucumbers, decanting, and adding an equal part or less of alcohol. The following is a formula for a spirit of cucumber seeds used as a medicine:—

	Parts
Sem. cucumeris recent. contus.	100
Spirit ammon. arom.	4
Sp. coloniensis	300
Sp. vini rect.	300

Macera per hebdomadem, exprime et filtra. Half an ounce to be added to the water in which the hands and feet are washed.

#### The Change.

*Pharmacist* (48/111) sends information of a lady who, having bought 2d. of liquorice, tendered half a crown, and having received the change, including a florin, returned to the counter asserting that the change was not correct. "Pharmacist" asserts that she had substituted a penny for a florin. "Pharmacist" did not yield to her demand. She adds she afterwards visited another chemist in the neighbourhood (London, S.E.) and attempted a similar performance, this time successfully.

6/110. *Specs.*—Freezing Mixture.—The simplest freezing compound is made of 2 parts of powdered ice and 1 part of common salt. If you do not use ice or snow, nitrate of ammonia is the best, or nitrate of potash and sal ammoniac, 1 part each, and water 3 parts.

2/112. *Edina*.—The average dose of chloral for an adult is 10 to 30 grains, which is often repeated in two hours. It would be ridiculous to give you a statement of the largest dose which may be taken with safety. There is a case on record of a German soldier who took 430 grains in 3½ hours, and recovered; but to administer anything approaching such a quantity on the strength of that record would be criminal madness.

14/110. *W. H. B.*—Modelling Wax.—(1) Bees-wax, lead plaster, olive oil, and yellow resin, of each equal parts; white bole, q.s. to form a paste. (2) Bees-wax, 200; Venice turpentine, 26; lard, 13; precipitated bole, 145. Mix, and knead the mass under water.

41/109. *Digitaline*.—We must refer you to this journal of June 9, 16, and 23 for discussion on violin varnish. An Amber Varnish such as alone might be useful as a violin varnish may be made as follows:—

Amber in small pieces	..	..	..	2 oz.
Venice turpentine	..	..	..	2 fl. oz.
Pale linseed oil	..	..	..	1½ "
Dissolve and add				
Oil of turpentine	..	..	..	2 fl. oz.

Or a form said to yield a superior varnish is made from—

White amber	..	..	..	1 lb.
Fine nut oil	..	..	..	1 "
Turpentine	..	..	..	2 oz.

The white amber is made according to Meredith's process, by mixing 1 part of amber with 2 parts of rock salt, the latter in strong solution. The solution and the amber are mixed in a crucible and heated until the amber is white. The amber is then removed, heated again, washed to separate the salt, and carefully dried. To make the varnish it is gradually dissolved in the oil by heat. The turpentine is added when cooling.

14/111. *B. R. H.*—You will find information respecting army dispensers contributed by two sergeant compounders of the Medical Staff Corps in *THE CHEMIST AND DRUGGIST*, June 30 and July 7. There are special regulations for naval dispenserships, these being employed in the naval hospitals. There are not many, and a pharmaceutical certificate is required from the persons to be appointed. Candidates must be between 20 and 25 years of age, and the pay varies from 5s. to 10s. per day, according to length of service. You might get the regulations from the Director General of the Medical Department of the Navy at the Admiralty offices.

**Cold Soldering**—Mr. J. E. Brown (Saithwaite) is good enough to send the following information applied for by an inquirer a few weeks since. It is a cutting from a technical paper, the title of which is not given:—"To cold solder, take 1 oz. each of ammoniac, common salt, and calcined tartar, and 3 oz. of antimony; pound well together and sift. Put this in a piece of linen, and enclose it well round with fuller's earth about an inch thick. Let it dry; then put it in one crucible, covered by another, over a slow fire to get hot slowly. When the contents get red hot and melt, let them cool gradually, and when cold pound the mixture. To solder with this, put the pieces on a table close together, with a crust of fuller's earth to keep them in place, leaving an opening at the top, and throw some of the powder between and over the joint. Dissolve borax in hot urine; dip a feather in it, and rub the powder at the place of the joint. It will immediately boil up; when the boiling stops, the union will be made.

53/107. *Alizarine*.—Insoluble Cement for causing paste-board to adhere firmly:—

	Oz.
Finest orange shellac	4
Strong spirit	3

Digest in a warm place until dissolved. The solution is of the consistence of treacle, and will hold anything.

38/112. *Donovan* says a customer of his has some orchids from South America which are infested by a species of large ant. They have tried hyd. perchlor., strychnine, and arsenic, but without dislodging the enemy.

[Petroleum is death to British ants, and may be as ruinous to the South American insects. Insect powder and strong tobacco infusion are also worth trying.]



23/112. *Signum*.—By "Jambul" seeds perhaps you mean "Jequirity" seeds (*Abrus Precatorius*), which are known as "Jumble Beads"; but you give us no idea of what they are used for.

66/111. *B. M. E.*—We find in Beasley's "Book of Prescriptions" one for a collyrium, given by "Mr. Mackenzie," of 1 grain of hyd. perchlor. in 8 oz. of distilled water; but we do not trace any formula by the same authority containing also ammon. chlor.

23/112. *Signum*.—Walnut stains may best be removed from the skin by chlorine water, solution of chloride of lime or soda, or liquor potassæ.

48/112. *Inquirer*.—The pharmaceutical certificates are only accepted *pro tanto* for certain of the Medical Preliminary examinations, not in the professional examinations.

29/278. *P. G.*—Your powder seems to be a tinted mineral substance, and has probably been impregnated with some disinfectant; but we should judge it is of no value now.

49/112. *Students and Apparatus*.—*A. D.* sends us a somewhat floridly composed document, addressed, not to us, but to "the Square," urging that "the whole of the apparatus as applied to the practical teaching of physics, which is at present removed from the eyes of observers under double lock and key, be placed freely at the disposal of those who would, if they could, make use of them." We do not understand whether this paper is a copy of one which has been addressed to the proprietors of the school concerned, or whether it is sent to us as a grievance; in the latter aspect it does not strike us as a very formidable one.

20/111. *Chemists*.—Cud Balls are made of cordials mixed with theriaca. The practice of giving balls to ruminants is altogether opposed to science. If ruminated at all, they are liable either to be lost or cause disgust. There is no better way of administering medicines, whether liquid or not, than as drenches in hot ale or thin gruel. The following is a good formula, the size of the ball being no objection. It should not be wrapped in paper—

Puly sem. anisi .. .. .	3iv.
" gent. .. .. .	3iv.
" fenug. .. .. .	3iv.
" gran. parad. .. .. .	3iv.
" capsici .. .. .	3j.
" zingib. .. .. .	3ij.

Theriaca ut ft. bolus.

18/112. *W. W.* would like a form for Maggot Lotion without mercury, for sheep. He says "Cuff's Fly Oil" is very satisfactory as far as killing the maggot goes, but the shepherds complain that the fly strikes again where it has been used. This objection applies also to all carbolic dips, on account of the organic matter they leave in the fleece. There is no *everlasting* remedy, nor is there any better preparation than acid carbolic, 1 part; ol. sesame, 25 parts, to which may be added ol. picis, 5j. With the latter the flies keep off for a longer time, but there is a certain amount of depreciation in the fleece, and the shepherd will find it the better plan to repeat the other application more frequently. Acid carbolic attracts flies only when glycerine is the vehicle; fixed oils do not do so, but those containing the least amount of extractive matter should be used, consistently, of course, with cost. If sheep are to be pastured near trees or specially unfavourable places for flies, it is a good plan to plentifully water them from a garden can and rose with Jeyes' fluid or emulsion; the latter does not attract flies afterward, but its effect is evanescent in their repulsion.

68/98. *Scottie* wants to know how the pink colour of the skin of pure Shropshire sheep can be heightened. The animals in question have been frequent winners of prizes, but lately have lost the beautiful tint so much prized in competitions. Their health and condition are splendid, and no change of diet has been given which can account for loss of colour.

[A good authority to whom we have submitted this question says:—"Try capsici pulv. c. ferri sulph. pulv. with a little pulv. fenug. in the food; 20 grains of the first, 10 grains of the second, daily, in about 3ij. of the fenug. Has there not been some change in the dip used or in the time of year? We have known such changes produced by being under cover or *vice versa* in winter."]

30/103. *Pax* (Paris).—An Artificial Gum has been brought into the market in America. It is almost colourless, but has otherwise the appearance of the natural article. It is somewhat sweeter than acacia gum. Mr. E. B. Stuart, who has examined it, reports in the *Western Druggist* that it is obtained by mixing dextrin with a solution of gum arabic, and evaporating in vacuo.

5/112. *August* wants information concerning "Jari-wari," said to be an Indian remedy for fever. "Jari" is one of the Indian names for the *Sorghum vulgare* grains, the ivory wheat, or Egyptian corn. Perhaps "Jari-wari" has some association with this. But we should expect that what is meant is a proprietary medicine called "Jvara-hari, or Fever Destroyer," sold by F. H. Bowden, 43 King William Street, London, E.C.

4/110. *Tomatoes*.—*J. C. K.* asks:—"Can any reader give me information as to the medicinal properties of tomatoes? I frequently hear of them being recommended for liver complaints, and I would like to know if there is any foundation for this belief; also what the active constituents are."

61/113. *Smelling Salts*.—*C. G.* sends the following as a formula he has used for many years, and which gives satisfaction:—

Ammon. chlor. .. .. .	3viij.
Potass. carb. .. .. .	3iij.
Liq. ammon. fort .. .. .	3ss.
S. V. R. .. .. .	3ss.
Ol. caryoph. .. .. .	xx.
" rosmar. .. .. .	xxx.
" cassia .. .. .	xx.
" limonis .. .. .	xxx.
" bergamot .. .. .	xxx.
Gum camphor .. .. .	3ij.
Musk .. .. .	gr. j.

M.

5/113. *A. P. G.*—Mr. John Wood, F.R.S., 61 Wimpole Street, or Mr. John Langton, 2 Harley Street.

30/110. *C. G.*—Shoemakers' Wax, we believe, is a compound of pitch and tallow. Jeyes' Disinfectant is said to consist chiefly of creolin, one of the products of the distillation of tar. In an action brought against the company last year one of the directors stated that the ingredients used in the manufacture were creosote oil, caustic soda, and resin.

#### Information Wanted.

[*Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.*]

27/110. How to repair "ebonite part" of Higginson's enemas.

11/50. Formula for "Rubiline," a mouth-wash ordered by dentists.

31/110. "C." would be glad of a suggestion to prevent children biting their nails; colocynth, aloes, and chiretta have been tried to no purpose.



# NEPENTHE.

(Prepared exclusively from Opium.)

The safest and best preparation of Opium; produces neither headache, sickness, or constipation.

Dose, the same as that of Tinct. Opii, B.P.

**Price 8s. per pound.**

*In the analysis of 10,000 prescriptions recently published in THE CHEMIST AND DRUGGIST, Nepenthe occurred more frequently than any other proprietary article except Vaseline and Chlorodyne.*

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**FIVE PRIZE MEDALS AWARDED.**

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Incomparably **THE BEST AND MOST ECONOMICAL.**

Being very strong and nutritious **THIS Cocoa** is cheaper and more satisfying than Tea.

Admirable,"	} BRITISH	"Delicate aroma,"	} LANCET.		
flavour perfect,"				MEDICAL	"pure & unmixed,"
and so pure."				JOURNAL.	"goes a long way."

**"ONCE USED, ALWAYS USED."—HEALTH.**

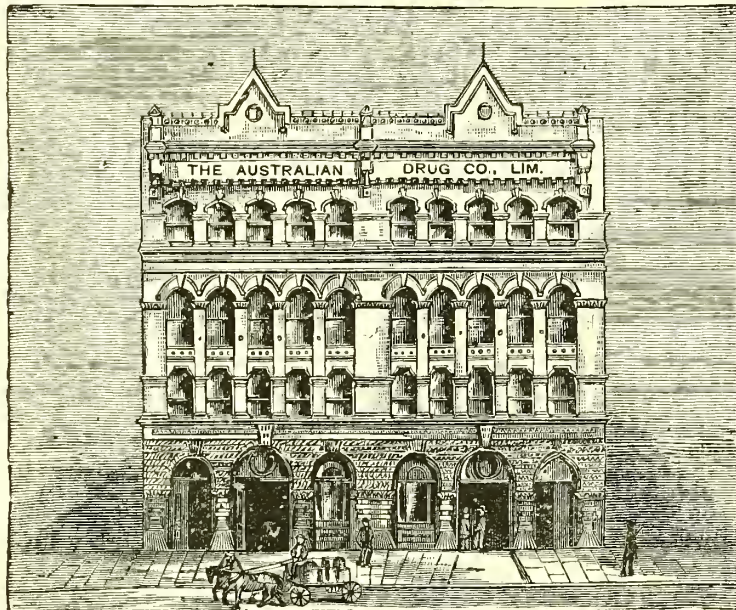
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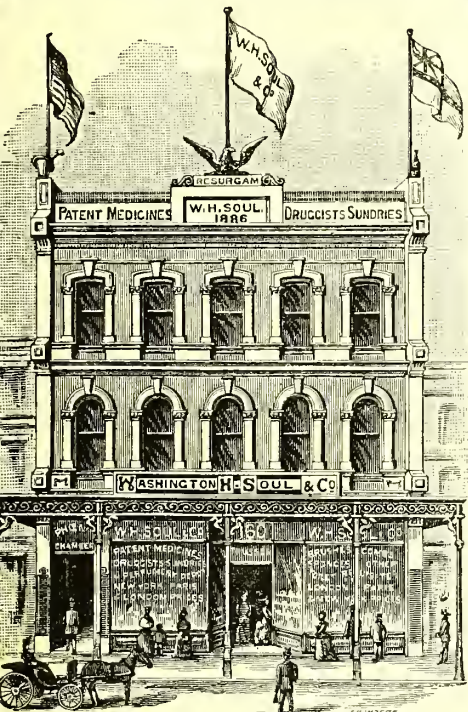
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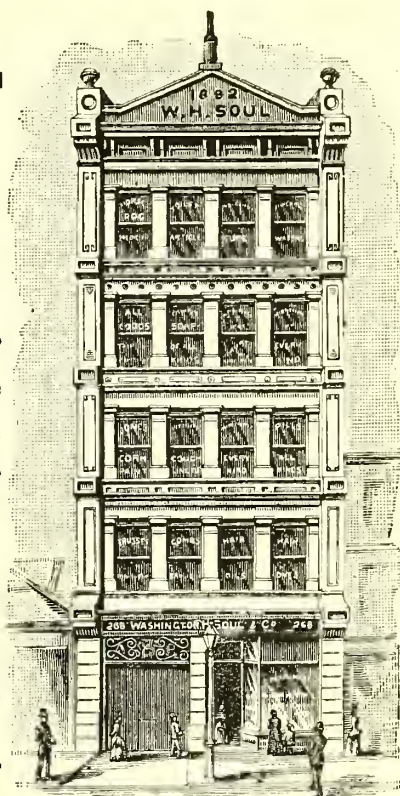
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prompt Sale in this Colony.*



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Our Extra Steam Refined quality, is in firm, hard, dry and snowy white crystals, entirely free from oily contamination (and therefore of the highest melting point.) As the original and largest manufacturers in the world of the true Japan Menthol, we guarantee our brand to be absolutely pure. Beware of substitutes. For full particulars, therapeutic uses, etc. see special circulars to be had on application.

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of a tarry and resinous nature which are objected to by some consumers are extracted. It is of a white colour, retaining its full aroma, pungency and strength and guaranteed absolutely pure and soluble in spirits of wine.

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28-lb. tins Dalmatian Insect Powder ... 1/2 per lb.

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7-lb. pottle P. Rhei E. I. Elect ... 3/- " "

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4½-gallon tins finest non-freezing Norwegian

Cod Liver Oil ... 4.6 per gal.

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barrel, bright and clear as COLZA OIL—1s. 6d. per

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40-lb. tin Baseline Petro. Jelly (firmer than

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Claims to be a Specific for all Congestive and Inflammatory conditions of the Respiratory Apparatus, and will be found efficacious in

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"Believe me, yours truly,

(Signed) G. VON LIEBIG, M.D.,

"Member of the R.C.S., Knight and R. Bavarian Court Counsellor, Professor in the University of Munich, Practising Physician during the Thermal Season at Reichenhall.

"Munich, 8th January, 1888."





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LONDONANNETT'S  
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IN BOTTLES, 13½d. AND 2s. 9d.

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THE ONLY PURE ESSENCE AND  
EXTRACT OF SNOW-GROWN  
PUMILIO PINES.

FOR GOUT, RHEUMATISM, SORE THROAT, CHEST AFFECTIONS.

SIR MORELL MACKENZIE wrote, December 9, 1887:—"I have much pleasure in stating that I have made use of Oleum Pumilionis during the last twenty-five years, that I consider it a most valuable preparation. It acts as an admirable tonic to the mucous membrane of the air passages in cases of chronic bronchitis and laryngeal catarrh. I am glad, therefore, to hear that the remedy is about to be used on a large scale, and I have no doubt the results will be highly satisfactory.

(Signed)

"MORELL MACKENZIE, M.D."



THE SNOW-GROWN PINUS PUMILIO.

PUMILINE ALONE, with the single exception of Pinol, possesses the physical and chemical properties which give it the faculty of being administered internally with **SAFETY**. It is, therefore, essential for Chemists to use Pumiline, as it is the only preparation obtained from snow-grown Pumilio Pines.

FOR TRADE PRICE LISTS, PAMPHLETS, ANALYTICAL REPORTS, &amp;c.—

G. &amp; G. STERN, 11 Billiter Square, LONDON, E.C.

## EUCALYPTUS GLOBULUS.

We distil pure oil of Eucalyptus GLOBULUS as a by-product in the manufacture of our Eucalyptus Boiler Fluid, and are, therefore, enabled to place it in quantities at a lower rate than has heretofore been asked for it.

DOWNIE B. I. P. CO., 4 Redcross St., LIVERPOOL;  
And 204 MARKET STREET, SAN FRANCISCO.

## W. EDWARDS &amp; SON,

157 QUEEN VICTORIA STREET, LONDON,

WHOLESALE AND EXPORT DEALERS IN

## Patent Medicines and Proprietary Articles,

ENGLISH, AMERICAN, FRENCH, &amp;c.

SOLE AGENTS for ROCHE'S HERBAL EMBROCATION,

Burchell's Anodyne Necklaces, Ford's Balsam of Horehound, Widow Welch's Pills, by Mrs. Smithers, Oxley's Essence Ginger, and the preparations of Messrs. Hudson & Son, late of the Haymarket, London.

PRICE LISTS SENT ON APPLICATION. ORDERS CAREFULLY AND PROMPTLY EXECUTED.



# SOUTHALL'S LIME WATER SYPHON.

The Liquid can be drawn off at the rate of a pint per minute.

## CALCII HYDRAS.

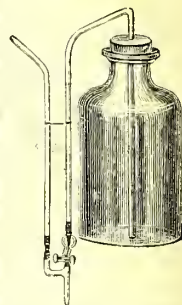
IN BOTTLES, SUFFICIENT FOR ONE GALLON LIQUOR CALCIS.

4/- PER DOZEN.

CAPACITY.—TWELVE PINTS. Price, including Fittings, 3/6 each. Bottles alone, 1/6 each. Any part of the Fittings supplied separately to replace.

“SOUTHALL'S NEW LIME WATER SYPHON” ought to be a very useful addition to Druggists' Sundry Appliances. It serves not only for drawing off lime water clear, but also for any macerated tincture.”—*Chemist and Druggist*.

SOUTHALL BROS. & BARCLAY, BIRMINGHAM.



# WYLEYS' GELATINE COATED OVAL PILLS.

The only Gelatine Coated Oval Pills of ENGLISH MANUFACTURE in the Market. Special List on application.

	Gross Botts
<b>Bismuth. Pepsin. Co.</b>	
(Wyleys'), B. Bismuth, Nit., 2 gr.; Pepsin Porci, 1 gr.; Ferr. Redact., 1 gr.; Strychnin, $\frac{1}{24}$ gr.	3/6
<b>Calcil Sulphid.</b> $\frac{1}{10}$ , $\frac{1}{8}$ , $\frac{1}{4}$ , $\frac{1}{2}$ , 1 gr.	1/8
<b>Cascara Sagrada (Ext.)</b> , 2 gr.	2/-
<b>Ergotin. Comp.</b>	
B. Ergotin, 1 gr.; Ferri Sulph. Exsic., 1 gr.; Ext. Hellebor., 1 gr.; Ol. Sabinæ $\frac{1}{2}$ m.; Ext. Aloes Soc., 1 gr....	3/-

	Gross Botts.
<b>Ferri Hypophosph. Comp.</b>	
(Wyleys'). Each pill represents 1 fluid drachm of Syrup of the Hypophosphites...	2/6
<b>Ferruginous (Bland's)</b> , 3 and 5 gr ...	1/8
<b>Ferri Quininæ et Strychninæ Phosph.</b> (Wyleys'), representing Easton's Syrup ...	3/-

	Gross Botts
<b>Hydrarg. et Arsenic. Iodid.</b> (Wyleys'). Each pill equivalent to 5 minims of Donovan's Solution ...	1/8
<b>Manganese Binoxid Pur.</b> , 1 gr.	2/6
<b>Phosphorus</b> , $\frac{1}{80}$ Ext. Nuc. Vom., $\frac{1}{2}$ gr. ...	2/-
<b>Podophyllin Resin</b> , $\frac{1}{3}$ gr.; Pil. Rhei Co., 4 gr. ...	2/6
<b>Potass. Permang.</b> , 1 gr., 2 gr.	2/-

## WYLEYS & CO., COVENTRY.

LONDON ADDRESS—1A BURY STREET, ST. MARY AXE. E.C.

# LOFTHOUSE & SALTMER, MANUFACTURING CHEMISTS, WHOLESALE & EXPORT DRUG MERCHANTS HULL,

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles.  
QUOTATIONS ON APPLICATION.

## SOLUT. ÆTHERIS NITROSI (Æther. Hyponit.)

1 part to 5 Sp. Vini Rect. 56 o.p. makes Sp. Æth. Nit. 850.

This concentrated preparation is carefully drawn in our own laboratory, is highly recommended, and is daily finding increased favour with the trade for making Sp. Nitre, as required for use, and thus avoiding the risk of a development of free acid, which is more or less prevalent in Sp. Nitre that has been drawn some time. Price in Winchester Quarts, 3s. per lb., net.

## SYR. FERRI PHOSPH. CO.

This preparation is guaranteed to contain the full proportion of Phosphates as originally prescribed by Parrish, and will keep bright and without deposit. Price in Winchester Quarts, 6d. per lb. to account. Special quotations for quantities of 1 cwt. and upwards.

# C. R. HARKER, STAGG & MORGAN WHOLESALE & EXPORT DRUGGISTS

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DISTILLERS & IMPORTERS of ESSENTIAL OILS

STANDARDIZED AND GUARANTEED DRUGS AND PREPARATIONS FOR  
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REGISTERED ADDRESS FOR TELEGRAMS—"EDULCINE LONDON." Telephone No. 1949.





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To whom, at the UNIVERSAL EXHIBITION, in PARIS, 1878, the  
**GOLD MEDAL WAS AWARDED.**

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**BUYERS ARE CAUTIONED TO SEE THAT THEY GET THE  
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**DR. JOHN HOOPER'S PILLS,**

Which may be known by the Name of the Inventor being on the Government Stamp.

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**AMERICAN BUYERS are particularly Cautioned !!**

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## **COLD-DRAWN AFRICAN GROUND NUT OIL.**

**THE BEST OIL FOR**

Margarine Manufacturers. Fancy Soap Makers.  
Fried Fish Salesmen. Lime Cream Manufacturers.

**A CHEAP SUBSTITUTE FOR ALMOND AND OLIVE OILS  
IN GENERAL USE BY CHEMISTS.**

MANUFACTURED BY THE

**RIVER HEAD OIL MILLS COMPANY  
LOUTH, LINCOLNSHIRE,**

Sole Makers in England of Cold-drawn African Ground Nut Oil.



# THE HOP BITTERS COMPANY, LIM.

VERSUS

## ALBERT N. BECK, HASTINGS.

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BY AN ORDER made on the 13th day of July, 1888, by the Honourable Justice Stirling, in the Lord Chancellor's Court (Chancery Division), High Courts of Justice, the Defendant was perpetually restrained from "Infringing the Plaintiffs' Trade Mark, and from selling or offering for sale any HOP BITTERS, TONIC BITTERS, or other compound contained in bottles having affixed thereto any labels similar to or only colourably differing from the bottles and labels used by the Plaintiffs, or so contrived or prepared as to represent or lead to the belief that the compound manufactured or sold by the Defendant is of the Plaintiffs' manufacture."

N.B.—Any infringements on our rights or trading on our reputation by vending compounds as substitutes for HOP BITTERS will be summarily dealt with.

We would advise the Trade not to be induced under any pretext to sell or offer for sale compounds in imitation of our HOP BITTERS, but rather to trade only in the genuine article, which is the most honourable, and, in the long run, most profitable. Printed matter will be sent to any Chemist on application, and all inquiries promptly attended to.

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MANUFACTURED ONLY BY  
**THE HOP BITTERS COMPANY, LIM.**  
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# POROUS PLASTERS

(STRENGTHENING, BELLADONNA,  
AND ALL KINDS.)

ADHESIVE, BELLADONNA, MUSTARD, CORN, AND ALL OTHER PLASTERS.

Prepared for all Climates by **A. DE ST. DALMAS, LEICESTER,** Maker to the British Government and the Hospitals.

## THE SURGEONS' LINT,

V.B. QUALITY.

The superior quality of Newsome's Absorbent Surgeons' Lint is universally admitted. The V.B. quality is quite pure and of great superficial area and exquisite softness. The C., D., E., and F. qualities are equally pure and absorbent; E. is stronger in fabric.

**NEWSOME'S BLEACHED ROLLED BANDAGES, 3 in., 2½ in., 2 in.** Also **SURGICAL ABSORBENT OPEN BANDAGES**

Specially Bleached & Grey Carded Cotton Wools, Absorbent & Bleached & Grey Waddings; also Sheet Waddings, Tow, &c.

THE TRADE SUPPLIED THROUGH THE LONDON AND PROVINCIAL WHOLESALE HOUSES, OR FROM

**C. NEWSOME,** Spinner and Manufacturer, **MANCHESTER.**

London Agents—B. PRATT & CO., 1 Wood Street, E.C.

Telegraphic Address—"Newsome, Ancoats," Manchester.

### LINT.

### GAMGEE TISSUE.

(PATENT ABSORBENT GAUZE AND COTTON WOOL.)

### ABSORBENT COTTON WOOL.

ROLL BANDAGES.

### ROBINSON & SONS,

COTTON SPINNERS AND MANUFACTURERS OF

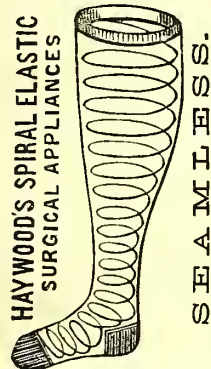
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### WHEAT BRIDGE MILLS, NEAR CHESTERFIELD.

Depot—55 Fann Street, Aldersgate Street, London.



## HAYWOOD'S PATENT SURGICAL APPLIANCES.



### STOCKINGS, SOCKS, LEGGINGS, &c.,

MADE ON ENTIRELY NEW PRINCIPLES.

**SUMMER REQUISITES.**—Seamless Elastic Stockings, &c., no seams to irritate the Heels and Feet. Ladies' and Gents' Belts, Light Texture. Trusses and Belts for Bathing, Bathing Caps, Sponge Bags. Lawn Tennis and Athletic Supports for Wrists, Elbows, Knees, and Ankles. Magnetic Appliances, Chest-Expanding Braces, Bathing Gloves, Hay Fever Handkerchiefs, Stocking Suspenders, Perfume Diffusers, Seltzogenes, Druggists' Sundries. Lists on application.

**J. H. HAYWOOD, CASTLE GATE, NOTTINGHAM.**

See INDEX TO ADVERTISEMENTS, pp. 31-33.



**FINEST ENGLISH PERFUMERY.**

EIGHT PRIZE MEDALS AWARDED.

**CONCENTRATED PERFUMES, of great fragrance and strength.**

TANGLEWOOD,	WHITE ROSE,	STEPHANOTIS,	16/, 20/, 28/, 48/,
OPPONAX,	MATHIOLA,	WHITE HELIOTROPE,	and 84/ per doz.

**EXTRA CONCENTRATED DITTO, CRAB-APPLE BLOSSOMS, 20/, 33/, 48/, and 60/ per doz.***"Chief among the fashionable scents of the season is 'Crab-Apple Blossoms,' a delicate perfume of the highest quality and fragrance. Prepared by the Crown Perfumery Company, of 177 New Bond Street."*—*Court Journal*.**The Invigorating LAVENDER SALTS (Registered), 16/ and 32/ per doz.***"Under the title of 'Lavender Salts' the Crown Perfumery have prepared a new invigorating smelling salts. Here we have a delightfully fresh perfume of lavender, mingled with something most invigorating and refreshing, a delightful addition to every toilet table, and a most agreeable deodoriser."*—*Ladies' Pictorial*.**OPALINE FACE POWDER** White, Rose, and Rachel. Packets, 3/6 and 7/ per doz.; boxes, 15/ per doz. Recommended by MADAME ADELINA PATIL.**BEST OLD ENGLISH TRANSPARENT SOAP**, unscented, 36/ per gross.**THE CROWN PERFUMERY COMPANY, 177 New Bond St., LONDON.***New Illustrated Price List free by post; also Show-cards on receipt of instructions for enclosure.*

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**Write to WARRICK BROTHERS,****OLD SWAN LANE, LONDON, E.C.,**

For Quotations for

**ESSENTIAL OILS****FRENCH POMMADES****FRENCH EXTRAITS****FRENCH WATERS****MUSK****AMBERGRIS****VANILLA**

Etc., etc.

**OLIVE OIL****ALMOND OIL****ORRIS ROOT**

Etc., etc.

**JUJUBES****PASTILLES****LOZENGES****CACHOUS****CANDIES****SPECIAL  
PRICES****FOR  
WHOLESALE  
AND  
EXPORT.****WARRICK FRÈRES, GRASSE & PARIS. Also NEW YORK, 84 Church St.****THE NEW REGISTERED PERFUME.**

*This most exquisite, original, and permanent Perfume has been pronounced by Connoisseurs to be the finest ever produced. It is distilled with the greatest care, and will not discolour the most delicate fabric. The fashionable world has pronounced it unique.*

**2/6, 4/6, 7/6,****& 10/6****per Bottle.**

*Gold Medal 1883*

**THE ROYAL  
PERFUMERY CO.**

OFFICE AND SAMPLE ROOMS—

**165 QUEEN VICTORIA STREET;**

WAREHOUSE AND MANUFACTORY—

**2 & 4 Brickhill Lane, Upper Thames St., London, E.C.****Wholesale and Export Perfumers and  
Soap Manufacturers,***Hold the Sole Right of its Manufacture, and have Registered it under "The Trade Marks Act," No. 28,217, May 1st, 1882.***THE ROYAL PERFUMERY CO.**

ALSO MAKE

**MATHIOLA**, a Perfume of exquisite fragrance.**GLYCERINE AND HONEY BALM**, a superior Cosmetic for the Skin. In jars at 1/6.**THE "SERVICE" POMADE** will positively restore Grey or Faded Hair to its original colour. In jars, 3/6 and 6/ each.**Obtainable of all Chemists and Perfumers in any part of the World.**



# WATERSTON'S SEALING WAX.



ELEVEN PRIZE MEDALS.



ESTABLISHED 1752.

## TOILET SPECIALITIES.

REGISTERED

DIANE DE POITIERS.



TRADE MARK.

Pommade de Diane de Poitiers  
Crème de Diane de Poitiers  
Savon de Diane de Poitiers  
Poudre de Diane de Poitiers  
Eau Dentifrice de Diane de Poitiers

Eau de Toilette de Diane de Poitiers  
Eau Régénératrice de Diane de Poitiers  
Eau Valentinoise de Diane de Poitiers

*A most attractive Counter Show. Sell readily. Liberal terms to Trade. Prices on application.*

MARIE DU BOYER, 41 NEW BOND STREET, LONDON.

## WHITE AND SOUND TEETH.

JEWSBURY & BROWN'S

## ORIENTAL TOOTH PASTE.



This old-established and increasingly favourite Dentifrice has been over Sixty Years before the Public. It is warranted to retain its properties and keep in good condition in any climate. The original and only genuine is manufactured solely by

JEWSBURY & BROWN, Chemists, MANCHESTER,

and is distinguishable by the Trade Mark, printed in red and green, a facsimile of which is annexed. Particular attention should be paid to this guarantee of genuineness, as numerous imitations are offered. Sold universally by Chemists and Perfumers, at 1s. 6d. and 2s. 6d.

The Trade and Shippers supplied by the leading houses in London and elsewhere. Bills and Show Cards forwarded on receipt of address cards and directions for enclosure.

# "KAMPHORKALK"

A fresh Disinfecting Powder. It is a combination of soluble Chlorides and Camphor.

THE ADVANTAGES CLAIMED FOR IT ARE—

It is free from Poison. It is free from Smell (except a slight odour of Camphor). It is Soluble in Water. It is White in Colour. It is not injurious to any fabrics. It is Effectual and Cheap.

EXTRACTS FROM REPORTS.

Professor WANKLYN says:—"It is a most powerful disinfectant."

Professor REDWOOD says:—"I have made several experiments for the purpose of testing the efficacy of 'Kamphorkalk' (Cooper's Camphorated Disinfectant), and am satisfied that it possesses the properties claimed for it, and that it may with advantage be used in cases where infective disease prevails; and for arresting the decay of animal or vegetable matter from which noxious effluvia may emanate."

Sold retail in pretty decorated Canisters, 2 lbs., 1/; 6 lbs., 2/ each. In 28-lb. Kegs and 1-cwt. Casks much cheaper in proportion.

Special Wholesale Agents—Messrs. Sanger & Sons, 489 Oxford Street, London.

Proprietor and Manufacturer—ALFRED HORNBY, RICHMOND, SURREY.



# BATES' SULPHUR SALT

(REGISTERED.)

AND

# FRIZZETTA

(REGISTERED.)

RETAIL 1/6.      RETAIL 1/6.

F. W. BATES, Chemist, Brooks's Bar, MANCHESTER.  
Telegraphic Address—"FRIZZETTA MANCHESTER."  
SUPPLIED BY ALL PATENT MEDICINE HOUSES.

## WINTER TOILET REQUISITE

### MOODY'S MELLINE

OR

### Glycerine + Camphor + Cream,

UNEQUALLED FOR ALL  
REDNESS, ROUGHNESS, and  
CHAPPING of the SKIN, HANDS, &c.  
Registered No. 48649.  
IN BOXES at 1d., 2d., 3d., and 6d. each.

PREPARED AND SOLD BY  
S. W. MOODY, WHOLESALE, RETAIL, AND  
MANUFACTURING CHEMIST  
6 WALKERGATE, LOUTH, Lincs.  
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## CORK SOCKS.

These articles are strongly recommended as  
A Preventive against Colds,  
Rheumatism, &c.

Can be obtained through all Chemists' Sundriesmen, &c.

MANUFACTURERS (WHOLESALE ONLY)—

### BISHOP & WARDEN,

161 GT. CHARLES ST., BIRMINGHAM.  
Price Lists Free on application.

## SHIPKOFF & CO.

### OTTO OF ROSE

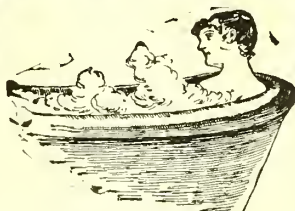
MANUFACTURERS & MERCHANTS,  
KIZANLIK, BULGARIA.

VIRGIN OTTO ONLY DEALT IN

REPRESENTED IN ENGLAND BY

GEO. P. BAKER, 19 Ivy Lane, Newgate St., London, E.C.

# PASTA MACK.



By using this new and  
excellent preparation a  
most delicious BATH  
AND TOILET WATER  
will be obtained.

Pasta Mack  
SOFTENS the WATER  
and  
BEAUTIFIES  
the  
COMPLEXION

TRADE MARK.

Of all Chemists and Perfumers.

Sole Manufacturer, H. MACK, ULM a/D.



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DE  
MATIÈRES PREMIÈRES DE  
PARFUMERIE.

## PARFUMERIES DE SEILLANS

(VAR, FRANCE).

Flower Pomades. Perfumed Oils. Flower Extracts.  
Essential Oils. Distilled Waters, &c., &c.

OF ALL WHOLESALE DRUGGISTS, OR WHOLESALE ONLY OF

R. C. TREATT, Dunster House, Mincing Lane, London

## OKELL'S ORIGINAL MONA BOUQUET

Retail, 1/, 1/9, & 3/6; Wholesale, 7/12/, & 22/6 per doz.

This much-admired Perfume (first introduced by the late Joseph Okell)  
may be obtained from the leading Patent Medicine Houses, Wholesale  
Druggists, and Druggists' Sundry Dealers.

Sole Consignee—THOMAS WEST, 59 and 61 Chester  
Road, Stretford, Lancashire.

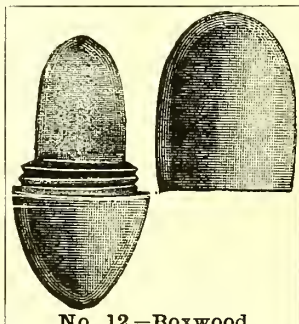
Special Agents—B. G. LENNON & CO., London, and Port Elizabeth,  
Cape Town, and East London, South Africa.

## THE CHEAPEST 6d. MENTHOL CONE.

Manufactured  
of  
Finest Japan  
Menthol.  
Guaranteed  
perfectly pure

TRADE,  
3/- per doz.

3 dozen  
Carriage paid



No. 12.—Boxwood.

Other Cones  
to Retail  
2d., 3d., & 4d.  
each, equally  
cheap.

Write for  
Price List.

SAMPLE  
POST FREE  
on receipt of  
business card.

CASTLE MENTHOL CO., 11 FURNIVAL ST., HOLBORN, LONDON.

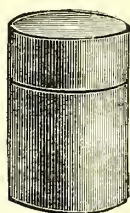


# SHIRLEY'S 2<sup>ND</sup> QUALITY MENTHOL CONES.

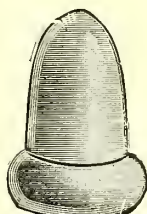


4d.—No. 104.

Boxwood. Barrel-shape. 2s. 9d. per doz.; 27s. per gross.



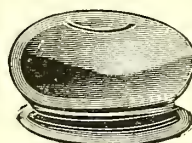
2d.—No. 100.  
Polished Willow Box.  
1s. 5d. per doz.  
13s. per gross.



3d.—No. 101.  
Willow Acorn.  
1s. 10d. per doz.;  
17s. per gross.



3d.—No. 102.  
Boxwood Pedestal.  
2s. 4d. per doz.  
24s. per gross.



6d.—No. 105.  
Boxwood Butter.  
3s. 4d. per doz.  
34s. per gross.



4d.—No. 103.  
Boxwood Pedestal.  
2s. 9d. per doz.  
27s per gross.

These Prices are net. and the Boxes have not the Printed Directions on them.

## EAU DE COLOGNE.



In flat watch bottles with nickel cap.

Each Bottle is neatly labelled, and contains an ounce of best quality Perfume.

A GOOD SELLING LINE.

4s. per doz.  
12 in a box.

## SMELLING SALTS



THE BEST BOTTLE OF THE SEASON. Filled with strongest ammonia and agreeably perfumed.  
2s. per doz.; 20s. per gross.

## TOOTH SOAP (White or Red).

A highly-scented and fragrant soap, nicely got up in a hinged metallic box (Jahncke's Patent).  
4s. per doz.  
The Soap can be supplied loose, 12 cakes in a cardboard box, but without metallic boxes, at 3s. per dozen. This leaves more profit to the retailer.



ARTHUR W. SHIRLEY, 30 Paternoster Square, LONDON, E.C.

Introduced 1855.]

## ROBINSON'S CONCENTRATED WATERS.

[Introduced 1855.

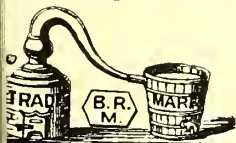
One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopoeia, and free from all Chemical Impurity. They will keep good any length of time in any climate.

Aqua Anethi, Concent., 4/ lb.	Aqua Cinnam. Ver. Concent., 6/ lb.	Aqua Fœniculi, Concent., 4/ lb.	Aqua Pimentæ, Concent., 4/ lb
" Anisi " 4/ "	" Cassia " 4/ "	" Menth. Pip. " 4/ "	" Rosæ " 8/6 "
" Camphoræ " 4/ "	" Flor. Aurant. " 8/6 "	" Ang. " 6/ "	" Rosæ Virgin " 10/6 "
" Carul " 4/ "	" Flor. Sambuci " 8/6 "	" Virid. " 4/ "	

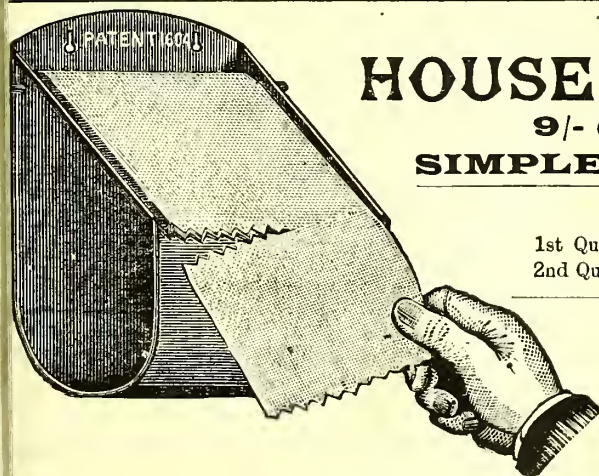
The above are put up in Bottles of 1/2 lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork.

From the LANCET, July 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Anisi, Cinnam. Ver., Rosæ, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopœia. They are excellent in quality, and will be very useful, especially in country practice."

Wholesale Agents: HEARON & Co., London, and most Provincial Wholesale Druggists. PREPARED BY THE INVENTOR, B. ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER.



# HEAD QUARTERS FOR TOILET FIXTURES.



## THE NEW HOUSEHOLD FIXTURE,

9/- dozen, complete with Roll of Paper.

SIMPLE. EASY. EFFICIENT.

REDUCED PRICE FOR REFILLS.

1st Quality ... 5/6 per dozen, or 63/ per case of 1 gross.  
2nd Quality ... 4/6 per dozen, or 100/ per case of 2 gross.

## JOHN S. DOWNING

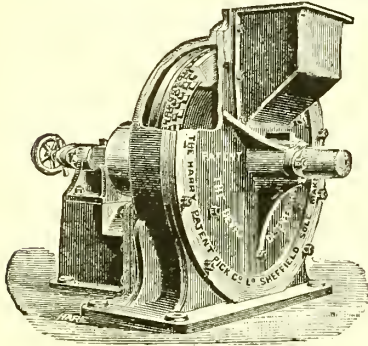
Commercial Street, BIRMINGHAM;

9 ROSE STREET, LONDON, E.C.; 73 VIRGINIA STREET, GLASGOW.



# HAVE YOU SEEN THE "DEVIL" DISINTEGRATOR & MIXER?

This Machine will Grind to Powder, Granulate, or Shred any Material, Animal, Vegetable, or Mineral.



The following table gives some information as to the quantities of various classes of material the Machines will deal with per hour:—

MATERIAL	No. 1 Size Machine	No. 2 Size Machine	No. 3 Size Machine
Coal, Fine .. ..	10 cwt.	20 cwt.	50 cwt.
„ (for Briquettes)	20 „	40 „	200 „
Lead Ore .. ..	30 „	60 „	140 „
Slate .. ..	20 „	25 „	50 „
Bones (Dry), Fine ..	3 „	20 „	50 „
„ „ Medium	5 „	35 „	90 „
„ „ Coarse	7 „	40 „	110 „
„ (Green) .. ..	3 „	6 „	15 „
Hoofs and Horns ..	2½ „	8 „	20 „
Rags .. ..	—	2 „	5 „
Indian Corn .. ..	5 „	15 „	40 „
Wet Clay .. ..	—	20 „	50 „
Oak Bark .. ..	—	15 „	30 „

Purchasers should compare the quantities of material ground per hour with the capacity of other Machines. There is no other Grinder that will deal with anything like these quantities in the same time

**CLOGGING  
ABSOLUTELY  
IMPOSSIBLE.**

No.	PRICE	Belt required	Diameter of Pulley	Revolutions per Minute
1	£30	3 inches	8 inches	1,000
2	£60	5 „	12 „	900
3	£90	7 „	14 „	800

The chief feature of this Grinding Machine is that it combines the centrifugal with the grinding action, and it can be adjusted to grind to any degrees of uniform fineness while in motion. No Screens or Grates are required. Will Grind Wet or Dry Material, Clogging being impossible.

Samples of material forwarded to us may be passed through the Machine in the presence of intending purchasers or forwarded by rail. Larger sizes made to order.

SOLE  
MAKERS

**THE HARDY PATENT PICK CO., LD.,** Engineers and Mining Tool Makers, **SHEFFIELD**

## THE SELF-OPENING TIN BOX COMPANY

(GRIFFIN'S PATENT).

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Telegraph Address—"TIN BOX LONDON."



Boxes ready made up, or the Patent Tops only (ready for making up), are supplied.

**THE NEW TIN BOXES** for all kinds of Hermetically Sealed Preserved Foods, DRUGS and CHEMICALS.

**THE NEW TIN BOXES** are as cheap as the ordinary Boxes, require no soldering up, and can be opened with a penny piece.

**THE NEW TIN BOXES** are being adopted by the largest Food-preserving Houses and CHEMISTS, to whom references can be given.

**THE NEW TIN BOXES** are also perfect for Tea and Coffee Canisters, Biscuit Boxes, Confectionery, Paints, Oils, Varnishes, Soaps, &c.

**THE NEW TIN BOXES** are described by the *Times*, *Standard*, *Chronicle*, *Illustrated News*, *Engineer*, *Grocer*, *Oil and Colourman*, and Press generally, as the "neatest and most elegant invention ever made."

### CAUTION.

IN THE HIGH COURT OF JUSTICE, CHANCERY DIVISION.

GRIFFIN v. NOAKES. 1887. G. No. 1,088.

GRIFFIN v. FRAVER. 1887. G. No. 1087.

As we understand from some of our Clients that, from false representations made, an impression prevails that the proceedings in these actions have failed, we beg to inform the public that such is not the fact, and that the proceedings are being carried on as fast as possible, in the Chancery Division of the Court, to restrain the Defendants from selling or making Tins similar to those manufactured by us, and from infringing our Patents. The Defendants, pending the proceedings, have been ordered by the Court to keep an account of all sales made by them. Our Solicitors, Messrs. CLARKSON, GREENWELL & Co., have had instructions from us to proceed against all persons so offending.

FOR THE SELF-OPENING TIN BOX COMPANY, G. FEATHERSTONE GRIFFIN, Manager.

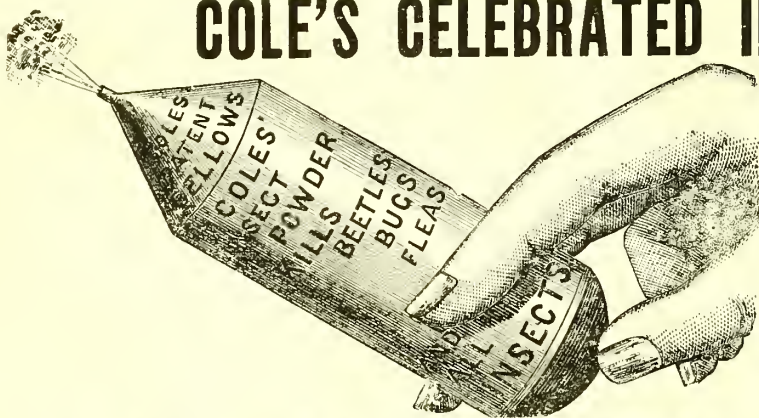


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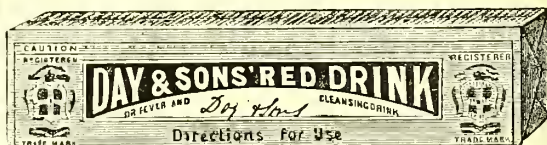
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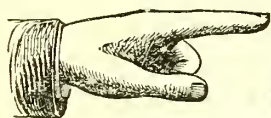
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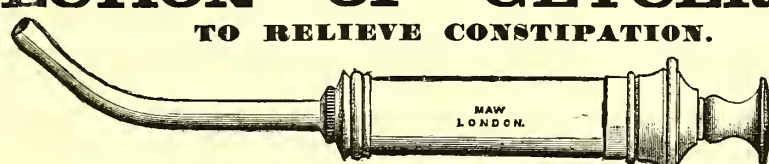


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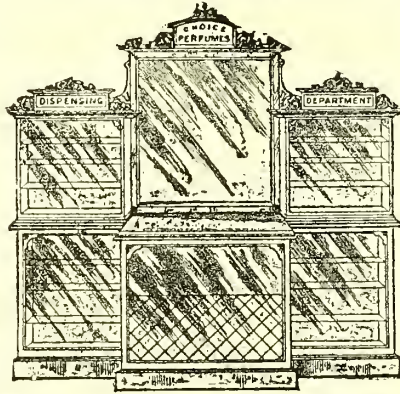
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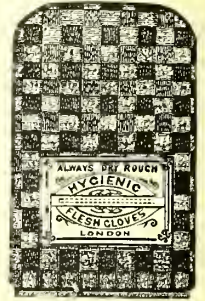
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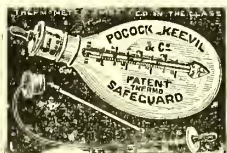
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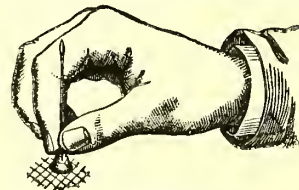
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## CLARKE'S IMPROVED PANAKINS (REGISTERED) FOR USE WITH CLARKE'S "PYRAMID" NURSERY LAMP.

ention any liquid food can be poured out or drunk, without scum or grease passing through the spout, and prevents  
poured into a Feeding Bottle, so objectionable with all other Panakins.

panakins will fit all the old "Pyramid" Nursery Lamps, and can be purchased separately.

for CLARKE'S PANAKIN, and see that his name and registered number (Registered 91,241) is on the Panakin,

ark "PYRAMID."

tent "PYRAMID" NIGHT LIGHTS are the only Lights suitable for these Lamps.

by all respectable Dealers, and Wholesale by the Patentee, S. CLARKE, "PYRAMID" AND "FAIRY" LIGHT

CKLEWOOD, LONDON, N.W. LONDON SHOW ROOM—31 ELY PLACE, HOLBORN CIRCUS, E.C.

AMID" FOOD WARMERS, by their peculiar construction—the glass chimney conducting and concentrating heat to

the water vessel—a larger amount of LIGHT and HEAT is obtained than can be in any other lamp of the same class.

OR SHELL.

AMID" NIGHT LIGHTS have a patent prepared wick, are made much larger than any other Night Light, and give

it; they are, therefore, very suitable for Nursery Lamps, Lighting Passages, Lobbies, &c., and adaptable to many

rich the common Night Lights are useless.

ctions for using the Patent "Pyramid" Food Warmer and Night Lights.

which is required to be kept hot to be placed in the porcelain panakin, and water in the tin vessel—just sufficient to

reclaim panakin being placed therein. Care should be taken in lighting the Night Lights not to injure the top,

ection for the wick, but simply apply a lighted match or taper and allow the material to melt away.

olds Half-pint Food, besides Water 3 6  
Three-quarters Pint Food " 5 -  
One Pint Food " 6 -

—The Patentee, in reply to numerous consumers, begs to state that he will warrant his PATENT "PYRAMID"

LIERS to answer the purpose for which they are recommended, only when the "Pyramid" Night Lights are burned

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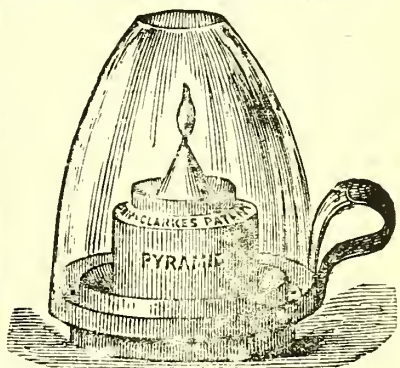
"Food Warmers are sold by all respectable dealers throughout the Kingdom.

THE PRICE OF CLARKE'S NEWLY- { No. 1 ... 30/- per dozen } Cash Discount  
ID "PYRAMID" NURSERY LAMP, { " 2 ... 33- " } 5 per cent.  
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" " " 2, 9/; " 3 " Tin Panakins, No. 1, 6/; No. 2, 10/; No. 3, 12/  
Clear Glasses, 4/; Roughed, 6/; Opaline, 6/; Coloured, 8/; Ruby, 8/.

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## CLARKE'S PATENT "PYRAMID" LAMPS & LIGHTS. THE BURGLAR'S HORROR.



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1/- retail, 6/ per dozen,

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7 6 doz. boxes, less 5 per cent.

The "PYRAMID" NIGHT LAMPS render the burning

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a lamp), are clean, portable, and render a Night Light

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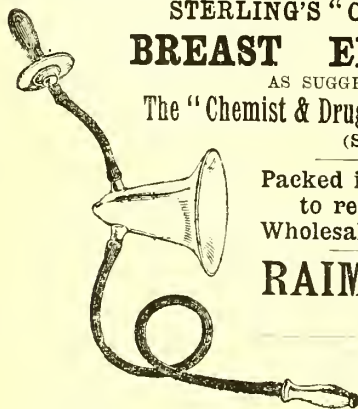
AS SUGGESTED IN

The "Chemist & Druggist" on June 16th  
(See page 781).

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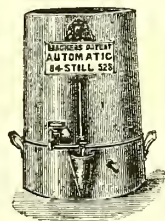
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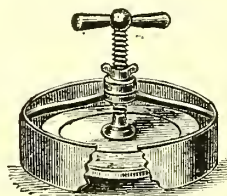


June 22nd, 1868.  
GENTLEMEN,—Enclosed please find cheque for the Still. I have given the Apparatus a fair trial for preparing the Medicated Waters of the Pharmacopoeia, both those prepared from the Oil and those from the Drug, and find that in both cases a water of full flavour and strength is produced.  
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Yours obediently,

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Messrs. Bracher & Co., Wincanton.

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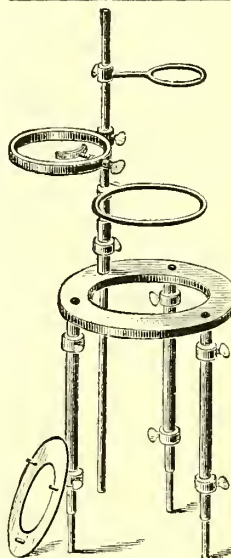


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# SEABURY & JOHNSON,

which is under the personal charge of an officer of the corporation. By this means we shall be brought into more direct relations with the trade of Great Britain and those firms of the Colonies who draw their supplies from London. We shall carry full stocks of all our products, some of which the trade have been unable to obtain through our late agency, and shall be able to execute with the utmost promptness orders for any of our goods and in any quantities that may be required by the home or export trade.

Heretofore we have been unable to offer a **Complete Line** of our **Antiseptic Specialities**, which have followed the development of Listerism. We now propose to place before our medical friends a

## COMPLETE SURGICAL AND ANTISEPTIC ARMAMENTUM,

the excellence of which they will thoroughly appreciate.

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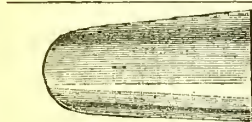


Fig. 5.



Fig. 1.

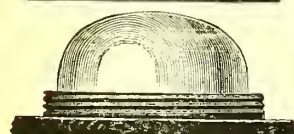


Fig. 3.



Fig. 4.

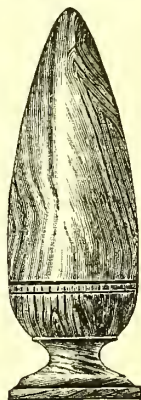


Fig. 6.

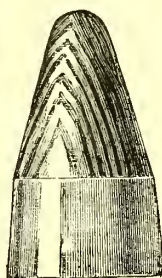


Fig. 7.

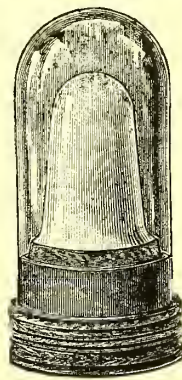


Fig. 8.

Fig. 1.	In Ebony Cases, flat for the pocket ... ..	Per doz.	6/-
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Fig. 3 & 4.	In Boxwood Cases, per doz., 2/8 and 4/-; in Vegetable Ivory ... ..	"	4/- and 6/-
Fig. 5.	In White Opaque Glass Jars with Red Celluloid Caps ... ..	"	2/6 and 3/6
	Mounted, in Stoppered Bottles ... ..	"	6/6
Fig. 6.	Mounted on Vegetable Ivory, in Glass Bottles, Screw Metal Caps ... ..	"	4/6
Fig. 7.	On Boxwood Mounts, Glass Covers ... ..	"	3/6 and 5/9
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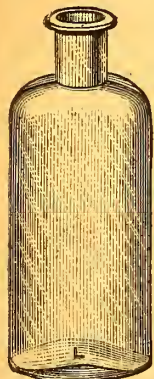


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SATURDAY, AUGUST 18, 1888.

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Miscellaneous.

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ADVERTISEMENTS for this Supplement can be received on FRIDAY MORNING, first post, though it is requested that these may be sent in as early in the week as possible.

EXCHANGE COLUMN ADVERTISEMENTS will appear on page 8 (bottom folio), and must be received not later than THURSDAY AT NOON, to appear in the issue of the Saturday following.

All Advertisements for this Supplement and Exchange Column must be prepaid. Remittances payable to EDWARD HALSE, and crossed MARTIN & CO.

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**WEST SURREY**.—Good-class Retail, Dispensing, and Prescribing trade; returning £950; some hands 20 years; rent £40; good house, large garden, splendid scenery, and good fishing; price £800. **SUFFOLK**.—Retail and Prescribing trade; returning £550 under manager; price £250 or valuation. Messrs. Berdoo & Co., 30 Jewry Street, Aldgate City.

**TO CHEMISTS**.—First-class Business for immediate Disposal, in a rapidly-growing seaside town; good-class trade; capital position; very superior shop and fittings; rent could be cleared by letting part of house furnished for the season; can have 7, 14, or 21 years' lease, at moderate rental; goodwill, stock, and fixtures complete for £375. Address, E. R. S., care of C. C. Munro, Esq., Solicitor, 48 Watling Street, London, E.C.

**TO CHEMISTS** and Druggists.—For Sale, a genuine Retail and Prescribing Business, in good thoroughfare; all ready-money trade, with Post Office combined, both doing a good business; stock and fixtures in splendid condition; an exceptional opportunity; price £150 part down, rest by convenient instalments as per agreement; the present owner will stay two or three hours daily for a month or so to get the purchaser in the way; ill-health the only cause of selling. For particulars address Prof. H. Procter, Phr. nologist, 58 Lime Street, or 63 Mount Pleasant, Liverpool.

### BUSINESS WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**A BUSINESS** in a good country town, South of England, or an increasing London suburb; returns from £700 to £1,200; a fair price will be given for a really genuine concern. Send full particulars to "Minor," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

### SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**AGENT** on Commission, to sell Hair Oils, &c., in Midlands and Potteries. Leonard & Co., New Rupert Street, Bristol.

**WANTED**, at once, a Junior accustomed to Dispensing; temporary, for three weeks or a month only. Lasham, Romford.

**JUNIOR** Assistant wanted for a month, indoors. R., 123 High Street, Sittingbourne.

**ASSISTANT** (outdoors); good address; accustomed to a brisk counter trade and able to prescribe; must be well recommended. Apply to Cross, 23 Brompton Road, London, S.W.



**A** **GOOD** Junior Assistant wanted; indoors: state experience, age, height, and salary required. W. E., 192 Uxbridge Road, Shepherd's Bush, London, W.

**A** **COMMISSION** is offered to a gentleman calling on Chemists; goods might be forwarded by parcel post. 1/27, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**A** **COMPETENT** Assistant, with good experience, for a Dispensing and Family business. Apply, with usual particulars, and enclosing carte, to Beck, Chemist, Hastings.

**WANTED**, a good steady Junior; one that can extract teeth and has no objection to assist with books preferred. Apply, stating age, salary required, &c., to J. H. Bowring, Chemist, Peahroke Dock.

**A** **QUALIFIED** Assistant to manage a branch; single; indoors; teeth extract d. Apply, stating age, height, references, salary required, to T. H. Ness, Chemist, Torquay.

**WANTED**, by an old established firm, a Traveller for the Midland Counties, to sell Sponge upon commission. Full particulars to O. L., care of CHEMIST AND DRUGGIST. Unexceptionable references required.

**DRUG** Trade, Wholesale.—Wanted, a Warehouseman; one who thoroughly understands the trade, and the forwarding of goods both at home and abroad. Address, stating age and salary required, to "Manager," Messrs. Adam Bros., 59 Moor Lane, E.C.

**WANTED**, an Assistant for Chemistry and Groceries (indoors); country; ready-money trade; must be steady and up to his work; no Sunday duties. Photo (to be returned) and full particulars to 279/24, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**A** **S** Second Assistant (indoors); qualified; aged 24 to 30; of good appearance and address, and accustomed to a good class Dispensing business. Apply by letter, with carte, stating full particulars, age, height, and salary required, to Edward C. Perks, 1 Sloane Square, S.W.

**WANTED**, a Junior (indoors); must be a good Counterman and accurate Dispenser. By letter, inclosing photo if possible (to be returned), age, height, experience, and salary required, Nurthen, 390 Strand, London.

**M** **ANAGER** wanted, at once, for branch in working-class neighbourhood, married preferred; unfurnished rooms found; state salary required and usual particulars, with references. C. J. Walker, Chemist, West Green, Tottenham.

**J** **UNIOR**, who is fairly up in Retail and Dispensing, and understands Post Office duties. Apply, stating age, height, experience, salary required, &c., and photo if convenient (returned), to "Manager," 50 Queen's Road, Brighton.

**I** **NDOR** Assistant, immediately, for Mixed Country trade; a steady and efficient young man, desiring an easy and permanent situation, and able to give satisfactory references, will be offered a liberal and progressive salary. Address, X, care of Messrs. Barron, Squire & Co., Bush Lane, E.C.

**M** **ANAGER** wanted for small Branch Business; must be married, able to extract teeth, and an abstainer; one with a knowledge of practical dentistry or photography preferred, so as to introduce it to mutual advantage; or a Junior with widowed mother would be treated with. W. B. Smith, Chemist, Gosport.

**P** **ARIS**.—An energetic, qualified Assistant is required in a first-rate Chemist's establishment; must speak French well; preference given to a tall man, single, with good appearance. Apply, by letter, full particulars, to "Chemicus," care of Evans & Lescher, Druggists, Bartholomew Close, London.

## SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

**J** **UNIOR**; aged 22; tall; outdoors; 7 years' experience; good references. G. M., St. Day, Cornwall.

**L** **OCUM-TENENS**; first-class experience; good references. "Minor," 5 Stanley Place, S.W.

**A** **S** Assistant or to Manage branch; aged 30; outdoors; Minor qualification. "Chemicus," 2 Chantry Road, Brixton, S.W.

**M** **INOR**; experienced Dispenser and Counterman; aged 24; good appearance and address; disengaged. "Statin," Manor House, Queenhill, Tewkesbury.

**T** **EMPORARY** Assistant or Manager; good experience; Prescribing, Dispensing. W., 31 Russell Terrace, Leamington.

**S** **URGEON'S** Dispenser; 6 years' experience; aged 21. "Dispenser," care of Dr. Jal and, Horucastle.

**T** **EMPORARY**, disengaged after September 1st. "Statin," 151 Nevill Road, Stoke Newington.

**A** **S** Manager of Branch or Assistant; aged 26; varied experience "Chemicus," 7 Vicarage Road, Oldbury, Birmingham.

**O** **UTDOORS**; 15 years' experience; aged 30; good Counterman. B. B., 144 Westmorland Road, E.E.

**W** **HOLESALE**; wet or dry counter; good experience; aged 30. A. T., 319 Roman Road.

**A** **S** Dispenser to a Surgeon; time for study. B., 65 Whalley New Road, Blackburn.

**A** **SSISTANT** in Wholesale. Wet or Dry Counters; 7 years' Retail and Wholesale; aged 23. F. L., 4 Bellevue Place, Beeston Hill, Leeds.

**L** **OCUM-TENENS**; qualified; 12 years' experience; excellent references; married; abstainer; disengaged August 25. F. W., 12 The Grove, Ealing.

**A** **SSISTANT**. Branch Manager, or Surgeon's Dispenser; good prescriber; 13 years' experience; married; unquestionable references; disengaged; moderate salary. W. M., 20 Prince's Street, Landport, Hants.

**M** **ANAGER**; married; qualified; experienced Dispenser; successful Prescriber; steady and reliable; permanency required. "Codex," 126 Ball's Pond Road, N.

**B** **Y** unequalled Assistant, either as Dispenser or in Retail, to manage branch; 11 years' experience; small salary. E. Porter, 26 Queen's Crescent, Reading, Berks.

**A** **S** **DISPENSER** to Surgeon or Manager of Branch; competent; aged 24; married; permanency desired; could make tinctures, &c. P. I. L., Mr. Turner, Post Office, Radcliffe-on-Trent.

**A** **SSISTANT** or Dispenser, home or abroad; qualified; aged 26; excellent references. A. P. S., Mr. Tallent, 2 Monmouth Street, Sheffield.

**A** **SSISTANT** or Manager for Branch; reference; can Dispense. Prescribe Extract Teeth; not qualified; married; aged 30. Address, "Cortex," 129 Graham Street, Penrith.

**A** **SSISTANT**; early; aged 25; good Retail and Dispensing experience; no objection to market town business. Geo. Reed, 16 Howard Terrace, Morpeth.

**A** **S** Manager; experienced; qualified; first-class Prescriber and Dispenser; town or country; married; highest references. "A," care of Mr. Lipscombe, High Street, Hildgate, London, N.

**A** **SSISTANCE** during part of day or charge of Branch, or to Dispense and keep books, by experienced middle-aged man accustomed to Prescribe; small salary, or comfortable lodgings with board. "Alpha," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**A** **Manager or Branch Manager**; aged 23; married; no family; qualified; good prescriber and dispenser; can extract; thoroughly competent; in or near London; to live on premises preferred; 5 years' reference as manager; good testimonials; moderate salary. A. P. S., 80 Earl Street, Edgware Road, London.

**F** **URNISHED** Room, near City Road, in return for few nights' Dispensing. J., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

## APPRENTICESHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**W** **ANTED**, a well-educated youth as an Apprentice to a Chemist in a seaside town on the South Coast; would be treated as one of the family with every home comfort; premium moderate. For particulars, apply to F., Messrs. Meggeson & Co., Miles Lane, Upper Thames Street, E.C.

**A** **P** **P** **RENTICE**.—A. Smith, Dispensing Chemist, 5 High Street, Newport, Mon., has a vacancy for a youth who has passed the Preliminary Examination; comfortable home, with time for study and recreation, are among the advantages offered. Last pupil was awarded the Pharmaceutical Society's Silver Medal for the best Herbarium.



